115

Clinical Lecture

ON THE

CHOICE OF OPERATIONS AT ALL AGES FOR STONE IN THE BLADDER,

FOUNDED ON TWELVE CASES RECENTLY IN THE WARDS.

By SIR HENRY THOMPSON,

SURGEON EXTRAORDINARY TO HIS MAJESTY THE KING OF THE BELGIANS, SURGEON AND PROFESSOR OF CLINICAL SURGERY TO UNIVERSITY COLLEGE HOSPITAL, ETC.

GENTLEMEN,—Since last we discussed the subject of stone in the bladder here, but a few months ago, a series of twelve cases of that disease, at various ages, have passed through my wards. As these offer admirable material for a consideration of the different phases in which this disease is presented, I think I cannot do better than utilise it for you to the best of my ability on the present occasion. These twelve cases have embraced cases at all ages and of all kinds. I shall classify them on the board as follows:—

Lithotomy.	*Lithotrity.*
Under 2 years.	2¾ years.
Aged 16 ,,	23 ,,
65 ,,	48 ,,
65 ,,	51 ,,
	54 ,,
	60 ,,
	65 ,,
	72 ,,

Four were treated by lithotomy, including one of the children. Eight were treated by lithotrity, also including one of the children, an exceptional circumstance, to which I shall have to call your particular attention hereafter, and I am very pleased to add that every one of the twelve was discharged cured.

I think that the first question which will naturally arise in your minds will be—On what system was the selection of these cases made for the two operations? Why were those particular four cut, and those other eight crushed? Are there any principles to guide the decision to cut or to crush in all cases of stone? Such a question I take to be a most pertinent one, and on the ability with which it is practically answered by the surgeon will, I believe, depend much of his success in operating. I have often had occasion to remind you that by erring in the selection of cases for the two operations of cutting and crushing respectively, we may actually become less successful operators than if we employed, as in old time, the cutting operation for every case of stone, small or great, young or old, which presents itself to us. It is mainly by a judicious selection of cases for the two proceedings respectively that we can gain the advantages which the modern mode of crushing the stone places within our power. I am quite satisfied, for example, that had I cut every one of those twelve individuals, I should have had a death, perhaps two. I am equally satisfied that had I crushed every one, I should have had one death, probably two. The fact, then, that I had none is due, other things apart, to the adaptation of the operation to the case.

My aim, then, to-day is chiefly to answer for you the following question: "How do you select for each operation, respectively, the cases best adapted to each method?"

I reply, it is essential, in order to form a judgment, that you must previously become acquainted with the following particulars:—1. The size of the stone; or the amount of calculous matter, if multiple. 2. Its composition. 3. The age and constitution of the patient. 4. The conditions of the local organs.

First, the size of the stone. This is the most important feature, taken alone; and the earliest examination of a case should inform us accurately on this head. For if a stone is small, it is almost certain to be successfully disposed of by lithotrity, and if it is very large it will certainly be incurring a considerable risk to depend on the lithotrite for its removal. Were the alternatives always so complete as this, there would be no difficulty in determining the question at issue; but, as you well know, there are stones of all sizes between these two extremes, and many exist on the borderground, so to speak, of size, for which other circumstances than that of magnitude may influence a decision in the case. To speak approximatively, however, in the matter of size, I think I may fairly say that a stone which measures 1¼ in. to 1½ in. in its longest diameter is for the most part fairly amenable to lithotrity. A stone of which any measurement is 1¾ in. is mostly too large.

But how, it may be said, do you determine these measurements? You who accompany me round the wards know that, at my first or second visit to any case of stone, this quality of size is easily ascertained by means of a flat-bladed lithotrite. I catch the stone first in one diameter and then in another, and the distance between the two blades is easily read off at the handle. There are other and subordinate ways—such as with the sound itself;—but none are so certain or so accurate as this, and it should always be employed. At the same time, you determine whether other stones exist besides that which lies within the grasp of your blades, by feeling for them while still grasping the stone already caught.

But you want, secondly, to know the nature and composition of the stone. This is really scarcely less essential to know than its size. Remembering, then, that three-fifths of all stones, speaking roughly, are composed of uric acid and the urates, the other two-fifths phosphatic or mixed, and only now and then an oxalate of lime is met with, you will be prepared to expect a uric-acid stone if no circumstance contraindicates its presence. But, further, if in an ordinary healthy man of from fifty to seventy years you find a hard stone, it is 7 to 1 that the stone is composed of some form of uric acid, pure or with a base; but if he is a strong, hale, hearty man of that age, and his urine is clear, it is 15 to 1 that the calculus belongs to this class. An oxalate-of-lime stone is more likely to be found at an earlier period of life, and the man has probably a less healthy appearance. If the stone be phosphatic, the patient is often broken in health, and the urine mixed with mucus, pus, phosphates, and a little blood. Next, there is the evidence to be derived from the "feel" of the stone by the sound, and the note which it utters when you give it a short, sharp tap. With uric acid and oxalate of lime the note is clear, and on drawing the beak of the sound along it a firm hard surface is felt. But this is by no means decisive: you must feel your stone in the jaws of the lithotrite, and this will tell you more. The "feel" of an oxalate-of-lime calculus is wholly different from that of uric acid. I grant that this is appreciable rather to the practised hand than to that of the tyro, still I can describe perfectly what I mean. Suppose you have a good-sized uric-acid stone in the blades of your lithotrite; on turning the screw a little, and gently, you can easily feel the blades "bite"—that is, sink a little into the crust of the hard body; but if you have an oxalate-of-lime calculus in the blades, on screwing you make no impression, the stem of the male blade recoils with a spring, there is no "bite;" it is as though you had a piece of unyielding metal between the blades, not like a bit of some friable rock, which the other more resembles. On the other hand, a phosphatic stone gives a soft, uncertain sound when struck with an instrument, and the sensation of a rough, gritty body to it when drawing along its surface the beak of the sound; and the "feel" in the blades is also soft, gritty, and yielding. Indeed, with a little attention to these matters, and to the state of the urine, there is little or no difficulty in ascertaining the nature of a stone. It is quite true that in a few exceptional cases you may have a uric-acid stone or an oxalate-of-lime stone coated thickly with phosphates, and that you may be deceived thus; but these are rare instances, and by no means necessarily interfere much practically with the object we have in view—viz., the determination of the nature of the stone before operating. Thus, a sitting or two by lithotrity will soon remove the phosphatic crust, and a hard, unyielding mass of oxalate of lime may be arrived at, which must be extracted by lithotomy unless it be small.

Thus far we have considered under two heads the character of the stone itself. We will now study the questions as affected by the condition of the patient in regard of age and constitution. First, then, as a rule, to which there are

very few exceptions, no proceeding is so perfect for all cases below puberty as lithotomy. In the series before us, however, one of these exceptions has fortunately occurred, which I shall refer to hereafter. The best information we have enables us to say that the deaths are not more from lithotomy than one in fifteen cases below the period of puberty, and in infancy they are still fewer. All these are consequently so far disposed of. For adults only, therefore, the question of choice remains. I may say, then, that *for a small stone, whatever the age*, without any hesitation, lithotrity is the operation. I have to repeat that I have never yet lost a case of small stone by lithotrity. I mean by "small" the size of a bean or small nut—removable, say, at two easy sittings. This is a fact of the utmost importance, and the practical value of which it is impossible to overate. Every stone ought to be detected by the time it arrives at the size indicated; and, this being so, it is possible to remove it with a certainty of success and without risk to the patient's life.

Thus far no difficulty exists in our choice. But it is when we come to stones of an inch and upwards in diameter that other circumstances demand consideration. It is here that we look for other lights to guide us in our decision. Now I must remind you that in former time it was usual to admit that several conditions existed which were very unfavourable to lithotrity, and which, it was held, should incline the operator to prefer lithotomy. Among these, the strong tendency to rigors after almost any instrumental interference, supposed to depend on some derangement of the kidneys, was regarded as strongly contra-indicating the crushing operation. Now I think we may say it is very doubtful whether the phenomena so referred to are to be regarded as putting aside lithotrity altogether. I have of late given much consideration to this subject of "urethral fever," as it has been termed, although I have not time to say much about it now. I have long observed, in common with others, the strong tendency which exists in some persons to manifest constitutional disturbance after even very slight mechanical interference with the bladder and urethra. It has been the habit to say, and I have often said it, that this tendency, when strongly marked, indicates perhaps the existence of some degree of mischief in the kidneys. I confess I doubt this. I have yet to learn that this tendency is necessarily or even often associated with renal disease. It is true that if disease of those organs exist, dangerous fever is apt to arise from an operation of lithotrity, or from any slight mechanical interference. But that a very strong tendency to the occurrence of what has been termed "urethral fever" does exist in many who have no sign of renal disease is to me equally certain. Understand that I mean by this "fever" not ordinary surgical fever, nor pyæmia, and of course not any specific fever, as typhoid &c., but an occurrence of the following phenomena: Within a varying period of time after the use of an instrument, it may be after the first micturition, or after twenty-four or forty-eight or even seventy-two hours, the interval being often one of apparently perfect health, the patient is attacked with rigors, followed by dry heat, then sweating, often with much pain in the back, limbs, and head, and considerable depression of the vital powers, the urine being scanty and concentrated. This paroxysm has sometimes a tendency to recur, and is uninfluenced in this respect, as far as I can judge, by quinine. The occurrence of these events appears to me to be more an affair of constitution or temperament than of the presence or absence of renal disease. These symptoms appear readily among certain excitable or sensitive people, and I think I am right in saying they are more common among patients who are of Celtic than of Anglo-Saxon origin, using these terms in the broad general sense in which they have of late been usually understood. I say this advisedly, after a good deal of experience of patients among the two races, and I am quite satisfied that when I have to do with one of marked Celtic type I am likely to meet with the phenomena described after the most delicate mechanical interference. Such bear pain badly too, dread an instrument excessively, are impatient of control, and lose vital power rapidly under the influence of continued slight irritations. People with this constitution, whatever their nationality, do not well bear numerous sittings, nor the trouble of passing fragments, are apt to lose pluck and hope, and will be exhausted by pain and loss of rest before the numerous sittings essential for a rather large stone can be accomplished. I think, then, that this excitable temperament, this disposition to the fever I have spoken of, are the most unpromising conditions we can encounter in a patient with such a stone, so far as lithotrity is considered. And I cannot promise you that lithotomy is much better suited to them; more observation is necessary; but I am inclined to believe that when you are so unfortunate as to meet with a large stone in one of these people, you had better cut than crush. It is to be remarked, however, that it is always some one's fault if such a patient is met with having a large stone. He is sensitive, soon complains, and his stone ought to be found when it is small. There is little excuse for missing it. These patients are easily identified, not merely by the general evidences of excitability which they readily manifest, but by the tendency to rigor after the mere preliminary sounding.

Next, we have to consider the condition of the urinary organs in aiding us to determine the choice of operations. In both operations a healthy condition, or nearly so, of these organs is of course more favourable than the contrary. What are the deviations from health most commonly met with in adult calculous patients? 1. Chronic cystitis. 2. Enlargement of the prostate. 3. Inability of the bladder to empty itself at the act of micturition. 4. Stricture of the urethra. 5. Pyelitis and renal disease.

1. Chronic cystitis is by no means always present; but, when it is, the removal of the stone mostly, not always, suffices to effect its cure. When this result does not follow the operation, the bladder probably does not empty itself. (To be considered under No. 3.) Only when very severe and of long standing is chronic cystitis to be considered in connexion with our special object of inquiry.

2. Enlargement of the prostate rarely opposes any obstacle to litbotrity. In some of the most favourable cases I have had, and with the largest stones to which I have ventured to apply lithotrity, this condition has been present in a marked degree. The form of the lithotrite is particularly well adapted to enter the bladder easily when there is much enlargement of the prostate. There is not necessarily engorgement of the bladder and retention of urine, although often it is associated with—

3. Inability of the bladder to empty itself by the natural efforts. With this there is often associated more or less of chronic cystitis. If a patient passes a part of his urine, still more if he passes the whole of it, by catheter, troubles of a grave kind *may* arise in lithotrity, although this by no means necessarily happens. Those who are accustomed to daily catheterism bear instruments, and consequently lithotrity, remarkably well; and not only that, but they bear the withdrawal of the débris—a proceeding essentially necessary in these cases, since it cannot be passed by the patient's efforts. If the stone, then, is not large, and the cystitis is but slight, no difficulty need be apprehended. But if the bladder is irritable, the patient requiring to use his catheter frequently, lithotrity, and the presence of fragments, will increase the irritation; and he will require the catheter at such short intervals that his rest is greatly broken, the urethra becomes very tender, and he runs the risk of making false passages, or at any rate injuring the canal, perhaps loses power to pass his instrument properly, and his position is then one of extreme danger. A patient, therefore, who requires very frequent catheterism, whose urine is loaded with thick organic deposit, and whose stone is above an inch in diameter, as a rule, to which there are exceptions, had perhaps better be cut. If the stone can be removed at two, or at most three, sittings, no doubt lithotrity would be the safer operation. If six or seven should be requisite, perhaps lithotomy will afford him a better chance.

4. Stricture of the urethra is by no means an obstacle unless the stone is rather large. The method of meeting the difficulty will be mentioned in remarking on one of the cases.

5. Renal disease and pyelitis are unfavourable conditions for either operation. When the stone is small, lithotrity ought to be held responsible, and I accept the onus of removing such by crushing, although great care is necessary. The intervals between the sittings must be long, and the patient must be very carefully tended and watched.

Now for a few words touching the mode of lithotomy employed. All those in our list have been operated on by the lateral method. A few years ago you know the median

operation for a time came into favour, or, more correctly speaking perhaps, an extended trial was accorded to it by many surgeons in this country, myself among them. Confessedly, however, even on the part of its advocates, it was not considered adequate to the removal of large stones; and as meantime lithotrity has been advancing, and has become more and more extensively applicable, the want of an operation for small and middle-sized stones has disappeared. The only cutting method which, as a rule, is necessary now is one by which we can most safely and easily extract stones of rather large size, almost all beneath these being amenable to lithotrity. For this purpose lateral lithotomy is, doubtless, preferable, and, excepting only for some unusually large calculus, to which a high operation may be better suited, is almost invariably applicable both to adults and children. Hence I have applied it to each of these four cases of two years, sixteen years, and two of sixty-five years with unexceptionable results in every case. The only drawback was in one in which, owing to various circumstances, a slight degree of sloughing took place between the wound and the rectum in the second week after the operation. This was a case in which there was much deformity from anchylosed hip; in it there was much hæmorrhage, and a tube had to be introduced, with tight plugging round, to arrest the bleeding; and the stone in this case weighed nearly three ounces. When the patient left the hospital but a few drops of urine passed by the rectum, and the quantity was steadily diminishing. In the other cases no tube was employed; indeed now, unless bleeding takes place, in which case I use a "petticoated" one, well stuffed with lint, I have discarded this instrument altogether. I think its presence hinders the healing process, and often causes unnecessary and additional irritation of the bladder.

I shall now remark very briefly upon some of the cases upon the list before you.

Take the two children first—one less than two years, with a big stone; the other rather more than two years and a half, with a small one. About the first there could be no question; the stone of that small child was an inch long; the tissues, as they naturally must be, were so soft and yielding that I took the precaution of retaining the staff in the bladder until I had seized the stone, thus "keeping up my communication with the base of operations," as a military man might say. Nothing could answer better. But the other child had a stone no bigger than an orange pip, and I crushed and removed it entirely with four introductions of the lithotrite; and here, too, not a bad symptom followed. But mark one essential difference between these two cases: one child has a large wound across very important parts; the other has none. Who shall say in that former case what is divided and what is not? The little prostate of such a baby is much more than cut through completely; but what of the seminal ducts, &c.? I have often thought I should like to know the subsequent condition in adult life of twenty patients cut for stone in infancy; and to ascertain what, if any, injurious effects resulted to those organs recognisable at that period of life. There is a subject for some of you to follow out. At all events, whatever it might be, the other little patient was saved such a risk.

Among the lithotrity cases I shall refer to the man with tight stricture. He had been cut eight years before, and he was about as feeble and unpromising a subject as one could meet with. Nevertheless I accepted the risk of his case, for lithotrity. His stone was phosphatic, and of moderate size. I dealt with him thus:—I tied in a gum-elastic catheter, about No. 4, exchanging it for a larger one, and so arriving at about No. 10 in a few days; put him under chloroform, and introduced a small lithotrite, crushing and removing as much as I could. After a day or two's rest the process was reapplied, and repeated some three or four times, when the whole was successfully removed.

The case with renal disease cost a great deal of time and trouble. Three or four weeks elapsed between each operation, so much of the convalescing process had to be pursued after each sitting in order to ensure a fund of strength on which to draw for the next; for he was much depressed by fever after each. Happily we had the satisfaction of dismissing him in excellent condition—far better than I ever expected to see him.

The last case I shall particularise is that of a man aged seventy-two years, who was relieved of a large quantity of uric-acid stone in eighteen sittings. There were at least two or three calculi. On the whole it was rather too much for lithotrity; still I hesitated about the risk of lithotomy, for it is a great risk between seventy and eighty, and I accepted him rather reluctantly for the crushing operation. No doubt if you have, say, an ounce of uric-acid calculus in the bladder, it is much safer to deal with when existing in the shape of three or more stones than as one large one. Nothing could go better throughout the whole series until the last or eighteenth sitting, after which he had inflammation of the deep veins of one leg, with enormous swelling, induced no doubt by the passage of exudation matter from an inflamed vesical vein to the femoral. From all this he slowly rallied, and was dismissed cured; and he called upon us only last week, in excellent health, to show how his leg was rapidly diminishing in size, supported as it is by an elastic stocking which we gave him. Of calculous symptoms now he has not the slightest trace.

Here I must stop; but let me sum up all in nearly one word—namely, that three-fourths of what is spoken of as "difficulties in lithotomy" or "in lithotrity" would be resolved, in fact would almost cease to be among the "difficulties," were only an accurate diagnosis formed in every case of stone before deciding on the operation to be performed.

THE CHEMICAL RELATIONS OF URATES AND PHOSPHATES.

BY A. W. BARCLAY, M.D.,
PHYSICIAN TO ST. GEORGE'S HOSPITAL.

ANY fact bearing on the chemistry of the urine must be of value to the practitioner. There is scarcely any form of disease in which the character of the kidney-secretion does not become an important element, either in diagnosis or in treatment. If for the moment we put aside the more important questions involved in the presence of albumen, of sugar, of pus, or of blood-globules, and many other ingredients which may be regarded as wholly abnormal, there are yet many considerations involved in the deposits of urates and phosphates which are of great service in practice. They guide the intelligent observer in the selection of remedies; and not unfrequently they point more or less distinctly to conditions in distant organs of which the functional disorder of the kidney is only an index and a consequence.

The rule for the discrimination of the urates and the phosphates is so well known, so universally admitted, and so simple, that an exception might be supposed impossible. The urates are dissolved by heat, the phosphates by acid. A precipitate in acid urine soluble by heat would consist of some compound of uric acid; a precipitate in alkaline urine insoluble by heat would be an earthy salt, and probably a phosphate of lime. Conversely, a precipitate of urates ought not to exist in hot urine; a precipitate of phosphates should not be found in acid urine.

It is very many years since, as a student at St. George's Hospital, I submitted to Dr. Bence Jones, so well known as a chemist, who was at that time one of our teachers, the puzzle, which I cannot say is even now quite intelligible to me, how a phosphatic deposit could be found in decidedly acid urine. But until recently I never met with an instance of urates insoluble by heat. On May 10th, T. S——, aged seventeen, a porter, was admitted under my care at St. George's Hospital, in a state of considerable depression, with a quick pulse, a chapped and furred tongue, and persistent diarrhœa of some days' standing, and the suspicion of enteric fever seemed rather confirmed by slight elevation of temperature. To my own mind, the history was opposed to this idea. It seemed rather to have been a case of severe diarrhœa, in which the prostration was a mild form of collapse, and the further progress of the case bore out this diagnosis. The various secretions were naturally watched, and the urine was exhibited to me with a turbid, flocculent deposit, which my clerk pronounced to be phosphates, because the urine was nearly neutral, and the precipitate was insoluble by heat, but dissolved on the addition of acid. Its

appearance was certainly more like urates than phosphates, and I found, on examining it for myself, that the acid only dissolved the precipitate with heat, but had no action on the cold urine. It was consequently placed under the microscope, and was found to consist almost entirely of globular urates, with high refractive powers, mixed with some crystals of oxalate of lime. Their presence in nearly neutral urine was readily explained by the scanty amount of secretion consequent on the previous severe diarrhœa, but their insolubility by heat was a phenomenon for which I was not prepared. On the following day the urine was more decidedly acid, but there was no precipitate. On boiling, however, a copious precipitate was thrown down, which was immediately dissolved on the addition of a few drops of acid. I have already alluded to the difficulty of explaining the precipitation of phosphates in the presence of acid; when the deposit only occurs after the application of heat the change is still more difficult of explanation, because the urine after being boiled becomes rather more acid than before, as I ascertained distinctly in this case, and the granular precipitate does not dissolve readily with acid after it is allowed to cool.

Formerly we used to be taught that the presence of urates was only due to acidity, of phosphates to alkalescence of the urine; but that is a very limited view. It was probably only put forward in this broad form as antagonistic to the common expression of those days, that one or other deposit showed an excess of uric or phosphoric acid, the "lithic-acid diathesis" and the "phosphatic diathesis" of Dr. Prout. It is certain that such a conclusion is very likely to be erroneous, although, perhaps, it contains some element of truth. All that can be said with certainty at present in regard to the uric-acid salts is, that when they are precipitated there must be a certain excess of acidity, and if not an excess of the salt, at least a disproportion between it and the water as ingredients of the urine.

With reference to the presence of phosphates, I conceive that we must assume the same disproportion to exist between the water and the earthy salts whenever the precipitate is abundant, especially when the urine is not decidedly alkaline. It is not an uncommon practice in the present day to maintain a certain degree of alkalescence of the urine both in rheumatism and gout. In such cases it is quite remarkable how the amount of earthy deposit varies while the urine is freely alkaline, but I have long learned by experience that a copious deposit is an indication of depression, and is sure to be followed, if not accompanied, by other symptoms of a corresponding kind. At one time I used immediately to diminish the dose of the alkali, but I have recently observed that, without making any other change in treatment, the addition of a few grains of quinine daily will have the effect of at once diminishing the amount of deposit, and will enable the patient to persevere with such a dose of alkali as he could not otherwise have taken with impunity. Believing as I do that in both forms of disease it is desirable to neutralize as far as possible excessive acidity, the effect of the quinine is to me a point of great importance in the treatment of these disorders.

Bruton-street, July 12th, 1871.

ON THE ORIGIN OF CANCER.

BY CAMPBELL DE MORGAN, F.R.S.,
SURGEON TO THE MIDDLESEX HOSPITAL.

(*Continued from page* 81.)

I BELIEVE no one doubts that the secondary growths of cancer are often the results of implantation, as are those of non-cancerous diseases. The difficulty which lies in the way of the admission of an invariable local origin is the immunity for a protracted period found at times after operation. A patient may go on for eight or ten years, or longer, apparently free from disease, and then it may return. The return in these cases is often in the neighbourhood of the original tumour. This opens up a very wide field of inquiry. As has been before stated, those who maintain the blood-origin of cancer suppose that there must be another and concurrent cause—a certain aptitude in the tissue to develop the disease. The tissue alone may be in a fit state, or the blood alone in a fit state; but no cancer will be formed. It is argued then that, when the operation was performed, either the whole existing disease was taken away, and the blood, although still containing the poison, had no fit tissue on which to act; or that the operation was done at a time when the blood had been deprived of its poisonous qualities by the previous growth; and that, though the tissue might be fit, the blood was not. Hence a length of time might elapse before the two conditions came into conjunction. How long may the blood be cancerous without cancer being developed? It may be for life according to this view; but it would be to my mind more difficult to receive this than to accept all, and more than all, that lies in the way of the contrary hypothesis.

There is no lack of facts of development which we cannot explain, and are content to say that they occur in obedience to a law, but in connexion with which we never imagine an altered state of blood. Two children of different sexes are born, and the mammæ remain alike up to a certain age, and then in one only they begin to develop; they remain effective for a certain time, and then, while other organs are in full activity, they begin to decline. In some families the hair will fall at a certain age from a definite part of the scalp, elsewhere it will grow as well as ever; or a patch of hair may become white, while in other parts it will retain its natural colour. Cartilage will remain as cartilage for eighteen years, and will then ossify. In the first of these cases we see a tissue remaining quiescent for years and then starting into activity; in the second, the degeneration of a structure limited to a small spot, the remaining structure undergoing no change; in the third, a tissue undergoing continued and active growth of one kind for a long period, and then taking on a new phase of development. Now I believe that in instances such as these — and they are plentiful both in the animal and vegetable world — we have a clue to the fact that cancer may be present *potentially*, and remain for a time quiescent, to be developed in due course, independent of the condition of the blood. In breast cancer it is constantly noticed that for years before the disease has declared itself the gland has been functionally imperfect, if not physically different. The patient has been unable to nurse with it, or she has always noticed that it was not so full as the sound one, or that the nipple has never been so prominent. In the testicle it may happen that the diseased gland has always been a small one, or that it has not fully descended. In the case of epithelioma, a wart, or mole, or scale, has been seated on the skin for thirty or forty years perhaps before the disease has developed itself. I have been more and more led to the notion that the conditions determining a cancer exist in the tissue from the first, and that the disease has declared itself in due course, just as has the local degeneration of the hair. But I should not limit this to cancer. The same would apply, I believe, to many other tumours and degenerations; and I can see no greater reason for accusing the blood as a cause of these growths and degenerations than I should for the local baldness or the local greyness. The very conditions under which both scirrhus and epithelioma arise strongly confirm this. In the latter especially it often happens that there are several similar moles or scales which remain unchanged for years, and then the disease develops rapidly in one, the others still remaining quiescent. Now considering the recognised proneness of such scales to become epitheliomatous, we should expect that, if a cancer poison were in the blood, several of these would take on cancerous action. But this we never see. In scirrhus, as has been before mentioned, various forms of aberrant growth frequently precede or accompany the development of the cancer, but no cancer attacks them. What is seen in cancer in relation to these outgrowths is seen as often in connexion with other tumours not cancerous, and not even malignant in their nature. This will be again referred to when the hereditary tendency to the disease is discussed. It is admitted, then, that in some individuals cancer is impressed on the tissue long before the tumour shows itself, even from the embryonic state. But besides this, it seems not improbable that in many there is a condition of tissue, in one part or another, which readily takes on cancerous degeneration under irritation, while without that irritation it might never occur at all. It is only what we see in the

case of other diseases. A thousand people may have a blow over the tibia, and in one will form an exostosis, in another a myeloid tumour, in a third an enchondroma, while in the others, though the inflammatory action may be of greater or less intensity, no special disease will arise. There must be some predisposition to the disease, yet there is no ground for belief that it would have arisen without some exciting cause. I know no disease which better illustrates this than the cicatrix keloid before referred to. In some situations it will follow the healing of any wound. Yet the individual may be quite healthy, and the skin apparently quite natural, and in the same subject wounds may be made in other parts of the body and will heal without the development of keloid. Putting time out of consideration, this is just what we see in the return of rodent cancer or of epithelioma round the edges of a part cicatrised after operation. But though a greater tendency to cancer may exist, and though that tendency *may* exist in more than one part, that is widely different from the existence of a blood poison, which, when the disease is removed from one part, will be seeking some other habitation in which to work mischief.

What is here stated with regard to the long existence of a cancerous or other tendency in a tissue will apply to the degree of growth of cancer elements when they actually exist. In the young girl the breast tissue is present, and there is abundant growth going on in the body, but the special development of the mamma only takes place at a certain age, which may be hastened or retarded by physical or by moral circumstances. The same may be seen in a fatty tumour even. A small lump will be felt under the skin, and remain unchanged for years, and then rapidly grow into a large lipoma; but the general fat of the body will not increase—it may diminish. The same is often seen in other tumours. Now let us take a common case. A patient tells you that she has that day discovered that she has a lump in the breast. You find one as large as a walnut. It is watched, and at the end of many months has made but a slight increase. The growth of a cancer will probably be, *cæteris paribus*, proportioned to the amount of active growth elements, and should be the quicker the larger the cancer has become—i. e., the more of these elements it contains. If, then, but a very slight enlargement has taken place in the six months or more during which the tumour has been watched, how long may it not have been since the first true cancer tissue was developed? In some cases it may have been years. Of course in the large majority of cases the growth is from the first far more rapid. Take now a case on which an operation has been performed. Seven or eight years may elapse, and then there may be return. These, again, are exceptional cases; but the disease may have been present, though inactive, all that time. Two of the last cases which have occurred to me are these. I removed a cancer from the breast of a lady in July, 1866. She remained quite well, save that a little fulness was found in the axilla in 1869, which underwent no perceptible change till the end of 1870, when there was a distinct tumour. This began to grow rather quickly, and I removed it in March of the present year. It consisted of a congeries of enlarged cancerous glands. In November, 1864, I removed a cancer from the breast of a lady who had had symptoms of the disease for more than three years. For six years there was no appearance of return. Then there was found a small hard tumour, not larger than a small pea, about two inches to the outside of the cicatrix. There appeared also a fulness above the clavicle on the same side. The nodule near the cicatrix is now a little larger, and the skin is adherent to it. The gland above the clavicle has increased to a much greater extent. She has no constitutional symptoms, however. Are we to suppose that in these cases the cancerous state of blood was in abeyance for years? or that the cancer poison was in the blood, but found no fitting tissue all this time, and that then the axillary and cervical glands, and the single point near the cicatrix on the diseased side, assumed the proper condition? This would be strange, considering how rarely scirrhus is developed primarily in the lymphatic glands and skin. Is it not much more likely that some cancer elements were in the glands or beneath the skin at the time of operation, and remained dormant—just as a lipoma or an atheroma will remain dormant? If this may be the case for two or three years, there is no assignable reason why it may not be so for double that time.

As if to illustrate this point, my colleague, Mr. Nunn, called my attention, while this was being written, to the case of a patient in the hospital, who was admitted six weeks ago with a very large ulcer of the leg. Soon after his admission the house-surgeon grafted several small pieces of skin upon it, and several more at different times after. For more than three weeks these grafts remained as mere raised spots on the ulcer, then suddenly started into activity, and in the course of a week or less the whole ulcer was nearly cicatrised over. The patient was a red-faced, sturdy countryman. It might be said that the cases do not admit of comparison. I believe that they do, as showing that, under certain conditions which we do not recognise, the actions of growth will be in abeyance; and that then, under certain conditions of the nature of which we are equally in ignorance, growth of unusual energy will set in. The vegetable seed, we know well enough, can be kept for centuries without action, and can be made to germinate under recognised amounts of heat and moisture. In the animal kingdom, however, the higher we proceed the more difficulty do we find in determining the vital stimuli necessary to bring each part into action. I fully admit that there is great difficulty in accounting for the long delay which may occur between removal and recurrence. I fully admit that, in some cases, there may be the same disposition in other tissues to develop cancer *de novo* as there was in the tissue originally attacked; but the difficulty is not removed by accepting the doctrine of blood-poisoning, when all the facts are taken into consideration, especially the almost invariable return in some organ near the original seat, or in some internal organ, neither being the seat, save in very rare instances, of the primary disease.

The retrogression of cancer, either standing alone or connected with the development of other disease, is a subject of great interest. It has been proved from the records of the cancer cases in the Middlesex Hospital, that the occurrence and growth of cancer are not influenced by the majority of diseases.* But cancer has been known to be arrested in its growth and to retrograde spontaneously; and the development of pulmonary tubercle seems sometimes to produce the same effect.

The cases of spontaneous recession of cancer are too few to allow of any general inference being drawn from them. Instances have been seen of the disappearance of cancer while tubercle has been developing. But Mr. Sibley's paper shows that this is by no means a necessary event. Out of 173 cases in which a post-mortem examination was made, there were 11 in which active tuberculosis was present at the time of death, and not one in which the cancer appeared to be influenced by the presence of tubercle. The occurrence of cancer, moreover, is very common in families of which other members are consumptive. While it may be admitted that cancer and tubercle do not often coexist, there is no proof that they are antagonistic the one to the other. The very fact of the general healthiness of cancer patients may give one reason why tubercle is so rarely found in them. Another may be the fact that cancer is generally the disease of advanced life,—tubercle of early life. Before any conclusion can be arrived at as to the relation of opposition or otherwise between cancer and tubercle, and of the bearings of that relation on the question of blood disease, it must be ascertained whether the same does not exist between tubercle and other morbid non-cancerous growths.

(To be concluded.)

ON GASTROTOMY: WITH CASE.†

BY JOHN LOWE, M.D.,

SURGEON TO THE WEST NORFOLK AND LYNN HOSPITAL.

THE term "gastrotomy," applied by Sédillot to those operations which are performed for the purpose of providing a new and permanent aperture to the stomach, excludes, of course, all those cases in which it is opened for the removal of foreign bodies.

There is some advantage in this beyond the mere improvement in terminology: it serves to group together, for more accurate comparison, those instances in which the

* Sibley: Med.-Chir. Trans., vol. xlii.

† Read before the Medical Society of London.

operation of gastrotomy is undertaken for the relief of permanent obstruction of the œsophagus, whether arising from disease or injury. Including the one which I now bring under notice, this operation has been performed, in all, six times. As the whole of these cases have proved fatal, it is a question of considerable interest to determine on what the fatal result has depended; whether any precautions could have obviated these results; and whether, under any circumstances, the operation is one which promises to prove successful, or whether it is altogether unjustifiable.

For the notes of the following case I am indebted to Mr. Peacock, house-surgeon *pro tem.* of the West Norfolk and Lynn Hospital, who devoted much care and attention to the patient.

S. A. W——, a pale, anæmic woman, aged fifty-one, residing in Lynn, was admitted into the West Norfolk and Lynn Hospital at 11.30 A.M. on the 24th September, 1869, under the care of Dr. Lowe, suffering from stricture of the œsophagus and pharynx, supposed to be of a malignant nature. The patient states that about two years ago she noticed a slight difficulty in swallowing, but unaccompanied by pain. This did not materially increase until about nine months ago, when it became rapidly worse, and a tumour was observed, reaching from the cricoid cartilage to the base of the neck, which soon became on a level with the chin. At this time pain was complained of; it was more intense opposite the cricoid cartilage, and has never since been absent. She has taken no solid food for seven months, subsisting on beef-tea, brandy, &c. After being under the care of several medical men, and receiving temporary benefit from a succession of blisters, she consulted Dr. Lowe, who, at her own request, ordered her to be admitted into the hospital. The tumour has remained stationary for the last six weeks. There is no history of any member of her family having suffered from similar disease.

On admission she presented an emaciated appearance, with a peculiar pinched and anxious expression of countenance; pulse 95, soft and compressible, but regular. On examining the exterior of the neck a tumour was found, having the dimensions above stated. The larynx was thrown prominently forward; internally, the pharynx was found almost blocked up with a granular mass.

A consultation was held as to the expediency of performing gastrotomy, and it was decided that, at her own urgent desire, an operation should be performed, as she must evidently soon die if not relieved. An injection of beef-tea and port wine was at once administered, and at 12.30 P.M. (pulse 80, respiration 24), chloroform having been partially given, it was found to produce alarming symptoms—extreme faintness and pallor. Local anæsthesia was therefore substituted. An incision was made of a crucial form, each limb of which was an inch and a half in length, on the left side of the mesial line of the abdomen, and two fingers' breadth to the inner side of the costal cartilages. The abdominal structures were then divided down to the peritoneum. Very slight pain was produced during this part of the operation. Several slight vessels, which bled somewhat freely, were twisted; and as soon as all trace of hæmorrhage had ceased, the peritoneum was opened, exposing the left margin of the liver, which had previously been carefully mapped out by percussion. The index-finger of the left hand was passed upwards along the edge of the liver, and the stomach at once grasped by a pair of forceps passed along the finger. As soon as it was brought to the opening, an incision was made in the stomach and its edges united to those of the external wound by four sutures. A silver tube was then introduced, strapping applied, and the wound closed by colloid styptic, and over all was placed a fold of lint soaked in solution of carbolic acid. Enemata of beef-tea and port wine were ordered every four hours.—8 P.M.: Patient is easy and comfortable; pulse 95; respiration 30.

Sept. 25th.—9.30 A.M.: Passed a tolerably good night. The pinched and anxious expression is absent. She looks better, and says she has not been so comfortable and well for months. Pulse 96, steadily improving in tone.—10 P.M.: Complains of slight uneasiness in the chest; pulse 100.

26th.—Noon: Slight faintness and a rather troublesome cough.—Evening: No aggravation of symptoms.

27th.—1.30 A.M.: Was called hurriedly to see her, and found her pulseless, bedewed with cold sweat, lips blue, body cold. She died almost immediately after my arrival. The nurse states that the patient complained of feeling faint, and she came immediately to call me.

Necropsy, ten hours after death.—Body much emaciated. Wound healthy, with only slight trace of pus; healthy lymph uniting the integuments and stomach. Stomach healthy; inferior border slightly congested; no trace of inflammation either in it or the intestine. Pupils widely dilated. On opening the pericardium, four ounces of serum were found in it. The heart was much loaded with fat; structure soft; right auricle much distended with fluid blood; in the aorta a large decolorised clot was found. The thyroid body contained purulent points. The pharynx was almost closed by vegetations; a scirrhous mass extended to the base of the neck, but not into the chest, the intrathoracic portion of the tube being quite normal. The cervical portion of the œsophagus would merely admit an ordinary probe.

When I first saw the patient she was much emaciated and had a most anxious and depressed appearance. She could only swallow a few drops of tea with great effort. Her sensations of hunger and thirst were extreme. The fauces were filled with rough vegetations, and the gullet was so completely obstructed that it would not admit the smallest bougie. She begged earnestly to know if there was no operation which could relieve her—whether she could not have an opening made into the gullet. As the disease evidently extended to the base of the neck, I told her this was impossible; that the only thing that could be done was to make an opening into the stomach; that this was attended with much risk, and, supposing it to succeed, could only be of temporary benefit, and that I could not in the least advise her to undergo the operation. She wished to think the matter over, and shortly afterwards sent word that she would be glad if I would perform it, saying she feared not any result if she could only have it done. After again explaining to her fully all the danger to be incurred, at her earnest request she was sent into the hospital.

The operation was simple in the extreme, and comparatively painless—thanks to the ether spray. As soon as the peritoneum was opened, the margin of the liver came into view; the index-finger, passed along this, came into immediate contact with the stomach, which was readily seized, drawn to the orifice, and secured by stitches. The forceps, which I used for this purpose, answered well, and are, I think, preferable to the tenaculum, which requires more space for its use. The opening made in the peritoneum was only just sufficiently large to admit the finger, and yet was quite large enough. In uniting the edges of the stomach to those of the wound, silver sutures were passed deeply into the integument, avoiding the peritoneum. The tube introduced into the stomach was a full-sized laryngotomy canula, shortened to the length of an inch and a half, with the end carefully smoothed.

The sensation of relief during the first two days after the operation was most marked, the patient expressing herself as feeling better than she had done for the previous nine months. On the third day, when her husband came to see her, she said, "I feel so well, you need not come to see me until next Sunday." Slight faintness and a short hacking cough—the latter due probably to irritation of the pneumogastric nerve—were the first indications that all was not going on right; but the cough was not at any time violent, nor did it cause distress. The end came suddenly, whether in consequence of any change of posture I am not able to say; the night-nurse says that she did not at any time allow her to sit upright.

The examination of the body showed that the formation of a clot in the aorta was the only assignable cause of death; and there seems little reason to doubt that this was due to the altered condition of the blood from prolonged fasting, and to the shock of the operation,—two conditions, as Dr. Richardson has so well shown in his work on "Fibrinous Deposition in the Heart," very apt to lead to the formation of a clot.

In all the six cases which are recorded, five of which are already tabulated in Holmes's "System of Surgery,"* the operation was undertaken for the relief of œsophageal stric-

* Vol. ii., p. 338.

ture, one alone of these being non-malignant. In all, the obstruction was almost complete, and the patients were reduced to the last stage of exhaustion by starvation before the operation was proposed; and here we find the chief causes of failure—pre-existing blood-change, and inability to resist shock. In the latter stages of malignant growth, it is obvious, moreover, that the blood has undergone other changes than the mere withdrawal of its watery elements: there is distinct dyscrasia, and the blood is not in a fit state to serve the purposes of nutrition and reparation; and this want of reparative power is fully as formidable as the mere exhaustion incidental to previous starvation, or even more so: the one may, the other cannot, be overcome.

These are the most important conditions, it seems to me, in producing failure, so far as the patient is concerned. What are the causes of failure *quoad* the operation? There does not appear any reason to suppose that the mere incision into the stomach is by any means an extremely hazardous operation. The case of Alexis St. Martin shows well how reparation may take place under far more severe injury to that organ. So with Dr. Murchison's case. But the celebrated case of Shoral's proves that the operation in itself may be perfectly successful. In what, then, does the operation of Shoral differ? Simply in the fact that the wound in the stomach was immediately closed; that there was no strain upon it, and no tension of the nerves supplying it. The union of the stomach to the wound is apt to give rise to cough, and, when food is introduced, to efforts at vomiting. Both these conditions are extremely hazardous, and tend greatly to render the operation fatal by retarding the progress of adhesion, and even, as in Sédillot's case, tearing out the sutures.

Cough appeared in two of the six cases; vomiting* in two; and in two (Fenger's and Jones's) they are not mentioned. The apparent cause of death was, in four of the cases, exhaustion; in one, embolism; and in one, peritonitis. Peritonitis appeared in two cases only—namely, in Sédillot's and in Mr. Forster's second case. In the former it arose from vomiting, which produced separation of the stitches and withdrawal of the stomach from the wound; in the latter, from separation of the adhesions through the introduction of a tube into the stomach.

The age of the patient is not an unimportant item in enumerating the causes of failure. Five out of the six were over the age of forty-four, and three of these were over fifty. The remaining one was four years old; and, looking at this case independently of the unfortunate accident above-mentioned, one would say that it ought to have proved successful.

What precautions could have obviated the fatal result in all these cases? Clearly, we may gather this from their consideration, that if an operation in any similar instance is to have any chance of success, it must be done at an earlier period, while there is still some power of reparation left, and at a time when there is yet some material to draw upon, so that we are not compelled to put food into the stomach at an inopportune moment, when it ought to be at rest; for after the operation it seems imperative that the stomach should be kept empty and the patient supported by nutritive enemata. We should thus avoid the great risk of vomiting, which is almost necessarily fatal, since the food cannot return by the closed œsophagus, and must therefore remain as a continual excitant of expulsive effort. The introduction of the tube ought always to be effected in the first instance, as it is difficult and, as Mr. Forster's case proves, hazardous afterwards. The point at which the stomach should be opened ought to be one as far removed as possible from a fixed point, so as to cause as little tension as may be. Mr. Jones found considerable difficulty, in his case, in fixing the stomach, owing to the fact of his having seized it near the cardiac end. The closure of the wound with colloid styptic is, I think, a great advantage; and it is important to limit the action of the abdominal walls by means of strapping and bandage, so as to keep the wound as much as possible in a state of rest.

With these brief and imperfect considerations, I would, in conclusion, ask, Is the operation a justifiable one? If the cases already recorded be all we have to judge by, the answer is obvious. The data, it is true, are limited, but they are wonderfully cogent. To answer such a question we cannot, however, be satisfied with so narrow a basis of argument. The real question is, not whether an operation is justifiable when performed under the same conditions as these, but whether it is justifiable under *any* conditions. When, for instance, the disease is of limited extent, the state of the patient not one of actual starvation, the strength not yet exhausted, does the operation afford any chance of prolonging life? It may be said, and with much truth, that under these circumstances the patient would refuse to undergo the operation; but, if it is to succeed at all, it must certainly be done at this time. Most surgical authorities urge against the operation, that "the disease will certainly progress, and the operation cannot greatly prolong the life of the patient." But is not this equally true of Amussat's operation, and of others undertaken for the removal of malignant growths? What valid reason is there in favour of the one which does not exist for the other? Mainly, I apprehend, that malignant disease in the rectum requires earlier operation; and that liquid food can be swallowed when the obstruction is really greater and the disease more advanced than that of a cancerous bowel which has to give passage to solid matter. Is there any reason why gastrotomy should be less successful than colotomy if performed at the same stage of the disease? The same amount of relief would be afforded if the operation succeeded; the diseased parts would be at rest, and consequently the disease would make slower progress; the patient would be freed from the pangs of unsatisfied hunger; his last days made more supportable, and possibly his life considerably lengthened.

* Vomiting appears as a prominent cause of death in several cases of colotomy, and was attributed to the chloroform. Mr. J. Couper's case, for instance, exhibited no other assignable cause (*Med. Jour.*, Nov. 20th, 1869), also Mr. Maunder's and Mr. Carling's (Dis. of Test., 3rd ed., p. 177).

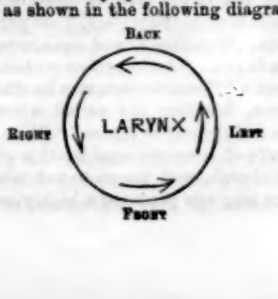
ON THE MOVEMENT OF MUCUS IN THE TRACHEA AND LARYNX.

BY HENRY VEALE, M.D.,
STAFF SURGEON, BOMBAY.

THE following observations regarding the movement of mucus in the trachea and larynx may perhaps be of interest to some members of the profession.

A gentleman in fair health had been troubled for several weeks with some huskiness of voice, a frequent desire when speaking to clear his throat by "hemming" or hawking, and occasional expectoration of a little viscid mucus. This was especially the case on his rising in the morning, when he used generally to expectorate one or two pellets of mucus, of about the size of a pea or a little larger, and latterly these had been slightly streaked or tinged with blood. He had no cough, strictly speaking; nor had he the least pain or difficulty of breathing.

It was at first thought that the complaint was confined to the back of the throat; but, after repeated examinations with the laryngoscope, it was ascertained that the mucus was not secreted by the fauces or larynx, but that it came from even below the bifurcation of the trachea; and that the pellets, as eventually expectorated, were formed in the following manner:—From the opening of one of the bronchi small bead-like particles of mucus would be seen to emerge from time to time, and then to ascend, generally either across the cartilaginous rings or along the back of the trachea; but sometimes, instead of passing directly upwards, they would travel partly round the tube in the grooves between the rings. Sometimes also they would come across and coalesce with other drops of mucus; and in this way a small pellet, perhaps of the size of a buckshot, would reach the upper part of the trachea. Here their movement would cease to be immediately upward, and become almost exclusively spiral—the direction being from right to left, as shown in the following diagram.



In the course of these circular or spiral movements in the larynx, the pellets could be seen to overtake one another and unite, until at length the mass so formed would reach the level of the vocal cords, and be expelled by a "hem" or a slight cough.

The rate at which the particles of mucus travelled round the windpipe varied. I never saw them make an entire circuit of the larynx in less than five minutes—usually they took from seven to eight minutes; and it is my impression that they moved more rapidly across the back of the larynx than in front or along either side, and much more rapidly round the larynx than round the trachea.

I have already mentioned that the mucus was occasionally tinged or streaked with blood, and this circumstance enabled me to identify the pellets in their change of place, and even after their expectoration. In the lower part of the trachea the circular movement is, I believe, quite exceptional, but I have seen it occur in the left bronchus. The *directly upward* progression of the particles is always accelerated by the acts of phonation, and especially by those of deglutition, but I have not observed such acts to increase the rate at which the sputa *travel round* the larynx.

Voluntary efforts of coughing seem to have scarcely any power of expelling small quantities of mucus from the trachea, or even from the larynx, unless the particles are situated either immediately beneath the epiglottis, or just below and between the arytenoid cartilages. I have frequently found the most forcible acts of coughing that could be made voluntarily to fail in expelling a small pellet from the recess beneath a vocal cord. I have seen small particles of mucus adhering occasionally to the edge of a vocal cord; still, the back of the larynx is, I believe, the part from which such particles are most easily expectorated.

The huskiness of voice in the case which enabled me to make these observations appeared to be occasioned by the frequent arrival at the glottis of small particles of mucus. During the daytime these were expelled separately by the various "hems" and clearings of the throat which their presence at the glottis induced; but at night, during sleep, when the movements of the windpipe in speaking or swallowing were suspended, the particles had time to accumulate, and in this way the pellets were formed which were expectorated in the morning.

I should add that I have not perceived the spiral movement of mucus in the air-passages to be occasioned or accompanied by any movement of the mucous membrane, or any muscular action; but the particles often undergo a change of form in making the circuit. In the grooves between the rings, for instance, they are elongated; but on reaching the back of the tube they become flattened, and sometimes assume the appearance of a highly magnified amœba.

Bombay, April, 1871.

Reviews and Notices of Books.

The Principles and Practice of Midwifery, with some of the Diseases of Women. By ALEXANDER MILNE, M.D. Illustrated with numerous Wood Engravings. Edinburgh: F. & S. Livingstone. London: Simpkin, Marshall, and Co. 1871.

DR. MILNE is an original and lively writer. The work is, of course, mainly obstetric in its subject; but it abounds throughout in lightsome digressions into the region of criticism, of pleasantry, of biography and autobiography, and even in exercises in versification, which are certainly of a most extraordinary character, and of the order met with in valentines and in the mottoes found inside of crackers. Before one gets far into the preface, these peculiarities of the author appear. He makes almost unnecessary opportunity to excuse his faults. "An imperfect sentence, a dull paragraph, or even a tedious chapter, may be often credited to a tedious labour, invading the period when the *cerebrum* should have indispensable repose." Then he goes on to cast the mantle of the same consideration over a busy physician in Edinburgh, well known to and much liked by us all, who "not long ago produced a highly creditable translation of the Satires of Horace." Who can be hard upon such an author as this? The work contains a very fair account of the present state of the art and science of midwifery, adapted alike to students and practitioners. Frequently the lively and digressive style of the author annoys the reader by interfering with the even course of the subject, or by disturbing the grave and scientific state of mind; but, for all this, Dr. Milne has contrived to condense a great amount of obstetric doctrine, both physiological and pathological, into his book, and to criticise it practically in the light of anatomical and physiological facts and of a certain amount of practice in the art of midwifery and of its difficult parts. The book is at once theoretical and practical. The author displays a considerable knowledge of obstetric literature in all its branches, and, at the same time, speaks with the discrimination of a practitioner. The teaching concerning the early resort to instrumental assistance in suitable cases is in accordance with the best experience of obstetricians. There is an excellent account of cephalotripsy, spondylotomy, and other later obstetric operations, as of the different modes of inducing premature labour, treating uterine hæmorrhage, &c.

The matter of the book is divided into no less than 73 chapters. This seems a formidable quantity. But the chapters are neither long nor exhausting, and it is difficult to find the author overlooking any subject or any material point of importance in connexion with it. Occasionally serious subjects are disposed of in an offhand and somewhat jaunty way; as, for example, that of the treatment of cellulitis. "There is reason to believe that an incipient cellulitis," we are told, "may be aborted by early antiphlogistic treatment." Leeches, a saline purgative, and one good dose of calomel (five to ten grains) at the outset, are the author's drugs, and his chief treatment. He is an unshaken believer in the antiphlogistic virtue of mercury. With a characteristic tendency to the careless use of figurative language, he says, "for reducing granitic hardness no remedy can hold a candle to it." ..... He disposes of objections to it in a very easy way, probably very different from the way in which he would speak if he were under the action of the remedy he is recommending. "If that dose should salivate, it can't be helped; better fluid gushing from the mouth than cooped up in the belly; confined in a very important locality, and no saying when or where it may escape." It is true that it is recommended to follow the purgative up with an opiate, and that perfect rest is enjoined; but there is a careless endorsement of a very much discredited practice here, which is open to very serious objection. The same faith in old antiphlogistics, and "the worthies who toiled away" in the middle of epidemics of peritonitis in the beginning of the century, using profuse bleeding and no less liberal purgation, appears at various parts of the book, and seems to us to be unworthy of the generally modern character of it. The author will forgive us for advising him to lay aside his tendency to use figures, and to parenthetical pleasantries and personalities when treating of such grave subjects as four grains of calomel three times a day in puerperal peritonitis, even with opium. Barring this tendency to recommend bleeding and calomel, the therapeutics of the book are modern, and not injudicious; but, speaking generally, the paragraphs on treatment want to be rewritten with more gravity and care. Even those on the dietetic treatment of the puerperal female are written with a looseness that is liable to be seriously misunderstood, though the main intention of the author, judging from other expressions, is correct. Arguing against too thin a diet in childbed, he says, "It is one thing to keep pouring stimulating diet into a patient when inflammation or fever have set in, but quite another to act thus

when no symptoms of these are present." We explicitly disapprove "of pouring stimulating diet" into a patient after natural labour. She should be fed, but not stimulated. It is only fair to say that the actual diet sketched by the author is very moderate, and includes the traditional dose of oil on the third day. In fact, it is a little too sparing.

The book is a comprehensive one, and, as we have said, consists of 73 chapters. It treats of the anatomy of the pelvis, the physiology of the uterine system, natural labour, and all varieties and complications of labour; of puerperal diseases, and of the principal diseases of women that are not puerperal, such as amenorrhœa, dysmenorrhœa, menorrhagia, leucorrhœa, different forms of nervous diseases, maternal impressions, &c. The volume closes appropriately with a notice of the subject of anæsthesia in its application to midwifery. Apart from the eccentricities of the author's style, which are amusing rather than serious, the work may be commended as a useful addition to our manuals of midwifery. If the author takes our hints in good part, and remembers them in preparing the next edition, he will deserve the thanks of both students and practitioners.

Der Bau des Menschlichen Körpers mit besonderer Rücksicht auf seine Morphologische und Physiologische Bedeutung. Von Dr. CHR. AEBY, Professor der Anatomische Wissenschaften in Bern. Dritte Lieferung. London: Williams and Norgate. 1871.

THE present part concludes Dr. Aeby's work, and treats of the Sexual Organs, the Vascular Apparatus, Lymphatics, Nervous System, and Organs of Special Sense. Without any wish to be captious, we think Dr. Aeby has set himself a task which the space at his disposal scarcely allows him to accomplish satisfactorily. To produce a work on anatomy which shall deal with the subject in a morphological and in a physiological point of view, and yet be confined to a volume of moderate size, must lead to one of two things—either the anatomy must be very loosely given, or the morphological and physiological points touched upon must be few. Dr. Aeby has elected to give the anatomy in a manner that, when compared with the great textbooks of Henle, Cruveilhier, or Quain and Sharpey, must be regarded as very imperfect; the relations of the muscles, for instance, of the vessels, and of the nerves being almost entirely ignored. On the other hand, the general observations with which each of the principal systems of the body is introduced are clear and instructive, and well adapted for the student. We will take the heart as an example of the mode in which the author deals with his subject. We should state that the account of this organ is preceded by a short introduction on the vascular apparatus generally, in which the functions of the several parts are lightly alluded to, together with the changes that occur in the passage from the fœtal to the adult state. He then commences the proper description of the organ, showing its double nature, and mentioning the vessels which convey blood to and from it. He proceeds to give its general form, and, broadly, the arrangement of its fibres; entering, however, into no details regarding the latter. He states that the spiral described by the outer layer consists of a convolution and a half. Dr. Haughton, in his late lectures at the Royal Institution, gives it—we think more correctly—at one and a fifth. Dr. Aeby does not give the number of the deeper layers, or make any reference to the recent labours of Pettigrew. The valves and musculi papillares are briefly described, the section concluding with a correct statement of the causes of the sounds of the heart. The whole account occupies a little more than thirteen pages, and is illustrated by five woodcuts, indifferent both in regard to subject and execution.

Now we must say we looked for more than this in a work dealing with anatomy from a morphological and physiological point of view. We expected to find at least some account of the weight and dimensions of the heart in respect of age and sex and weight of the body, the capacity of its cavities, the arrangement and action of the several layers of muscular tissue, and many other points, to which Dr. Aeby only gives the most cursory reference. Still, it must be said that we have noticed no errors, and that, as it is by no means difficult German, we can recommend it to any of our own students who may feel inclined to acquire a knowledge of that language by working in it at a subject with which they are already familiar.

A Sanitary Inquiry into the probable Causes of Yearly Epidemics, as observed in Leicester. By RICHARD WEAVER, C.E., Sanitary Engineer and Analyst. London: Simpkin, Marshall and Co.

FOR some years past Leicester has been remarkable for the prevalence of infantile diarrhœa, and in 1868 the Registrar-General threw out a hint by observing that there must exist in Leicester conditions exceptionally favourable to the production of diarrhœa. The local medical officer of health attributes this high mortality to the existence of open privies, impure well-water, and maternal neglect; and, arguing from the fact that the mortality among adults is unusually low, he thinks it proved that the infantile diarrhœa is not due to sanitary neglect.

Mr. Weaver has undertaken a fresh investigation. His paper is more than usually interesting; and as it affects the general question, its conclusions can scarcely be disseminated too widely.

In the first place, the author quotes Dr. Buchanan's observation that there has been a great increase in the deaths from diarrhœa in Leicester since the sanitary works were completed; those works including sewerage and water-supply. If, says he, the infantile mortality depended on the existence of privies, it ought to have diminished as more and more waterclosets have been introduced. So, also, if it depended upon the use of contaminated well-water, it should have been lessened if the new water-works supply were pure. He therefore instituted a fresh investigation. During one week in 1869 there were thirty-one deaths from diarrhœa. Of these, twenty-four were supplied with water from the water works, and the remaining seven were supplied from wells. It is estimated that about one-third of the inhabitants of Leicester are supplied with water from wells, much of which is of doubtful quality, and some notoriously bad. There was, nevertheless, a larger proportional mortality amongst those supplied with water-works water.

In the next place he observes that the disease varies with the rainfall; diarrhœa abating with heavy rains, and fever becoming intensified. From numerous analyses he finds the purity of the public water-supply at its maximum in April, and that the minimum is reached in August or September, by which time, particularly in dry seasons, the water is but little better than diluted and filtered sewage. These facts being noted, it became necessary to seek for the source of the water pollution. He finds that the Thornton reservoir, from which the supply comes, receives the sewage of the villages of Thornton and Markfield, both of which abound with cesspools, stagnant sewage, defective drains, fever, and diarrhœa; together with a polluted water-supply derived from the village of Bagworth, a mile away. A second reservoir has been more recently formed at Bradgate-park; and there is analogous origin, quality, and impurity in the drainage of villages as in the older reservoir. Diarrhœa affects all who partake of this water in a raw state; and Mr. Weaver remarks that young children suffer because they live upon liquid food, and drink more water

than adults; and that, although persons of all ages suffer, it is the physically weak who more frequently succumb. The diarrhœa becomes epidemic as the impure water becomes more and more concentrated; and it declines when the impurity is relatively diminished by the rains of autumn.

Mr. Weaver then directs attention to the defective condition of the sewers, to the want of ventilation, and to the accumulation of deposits, particularly in dry weather. The occurrence of rain then gives rise to the production of sewer gases, which, having no safe means of escape, rush into the dwellings through defective service drains. Mr. Weaver concludes by offering some judicious recommendations; and we can only congratulate the town of Leicester on having amongst them so sound a sanitarian, and hope that the authorities will have the good sense to follow his advice.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.

Session 1871.

SATURDAY, JULY 8TH.

THE Council assembled at one o'clock.

The Registrar produced a letter from the clerk to the magistrates at Swindon in proof of the identity of Frederick Henry Morris, convicted at Devizes of a misdemeanour, with Frederick Henry Morris, a surgeon and registered practitioner of Swindon, Wilts.

The Council considered that the evidence was satisfactory as to identity, and directed the Registrar to erase the name of Frederick Henry Morris, of Swindon, Wilts, from the Register.

The following report of the Committee on the application from the Board of Public Examiners of the Cape of Good Hope was read:—

"The Committee find that the Board of Public Examiners in Literature and Science, Cape of Good Hope, is constituted under an Act of the Legislature of the colony. The examination papers for the third-class certificates referred to show that the examinations, as stated, correspond generally with the matriculation examination at the University of London. The Committee therefore advise the Council to recognise these certificates as fulfilling the conditions of the preliminary examination.

(Signed) "WILLIAM W. GULL.
JOHN STORRAR."

On the motion of Dr. Storrar, seconded by Dr. Parkes, this report was received and adopted.

THE EXECUTIVE COMMITTEE.

The Council proceeded to ballot for the Executive Committee for the ensuing year, and the following gentlemen were elected: Dr. Bennett, Dr. Acland, Dr. Sharpey, Dr. Quain, Dr. Andrew Wood, and Dr. A. Smith.

PENAL MEASURES.

Mr. QUAIN said he had an impression that it ought not to be the duty of any two members of the Council to promote the punishment of any person who was accused of an offence. It was imperative upon the Council as a council to take instances of this kind into consideration; they were bound by the 28th and 29th clauses of the Act. On Tuesday last the memorial of a member of the medical profession, a M.D. of New York, practising in London, was read; and the various motions that had been proposed and seconded and carried were read out of the memorial. Individual members of the Council ought not to appear as they did to the public to be the especial promoters of the punishment of such a person. He therefore proposed—"That questions arising under Clauses 28 and 29 of the Medical Act shall be decided by the Council without the form of a motion proposed and seconded by individual members, which is required in ordinary cases."

Dr. STORRAR seconded the motion.

After a good deal of discussion as to the advantages and disadvantages of the course suggested, the President suggested that the subject should be referred to the Executive Committee.

Mr. QUAIN said he had no objection to refer the matter to the Executive Committee.

The motion was then withdrawn, and Dr. BENNETT moved "That it be referred to the Executive Committee to report on the most desirable mode of procedure in the case of motions having reference to any penal measures."

Dr. THOMSON seconded the motion, which was agreed to.

THE FINANCES.

The report of the Finance Committee was then read as follows:—

"The Finance Committee beg leave to present, in the table subjoined, a statement of the income and expenditure for the year 1870, compared with the income and expenditure of the preceding year; also an estimate for 1871.

"It will be seen that there has been an increase of income in 1870, and that this is partly due to an increase in

	Actual Income for the year 1869.		*Actual Income for the year 1870.*		*Estimated Income for the year 1871.*
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Fees received by—						
Branch Council for England ...	2281 15 0		2358 0 0		2377 16 8	
" " Scotland ...	617 10 0		725 0 0		606 16 8	
" " Ireland ...	732 0 0		1047 5 0		872 6 8	
		3631 5 0		4130 5 0		3850 0 0
Dividends received by—						
Branch Council for England ...	644 18 9		677 1 3		670 0 0	
" " Scotland ...	64 10 10		68 2 2		65 0 0	
" " Ireland ...	64 2 0		65 19 5		60 0 0	
		773 11 7		811 2 10		795 0 0
Sale of Registers	... ...	271 7 6	270 10 0		270 0 0	
Sale of Pharmacopœias and Balance of Account	... ...	...	607 6 0		200 0 0	
Penalties	... ...	47 14 6	9 19 0			
				887 15 0		470 0 0
		£4723 18 7		£5829 2 10		£5315 0 0

	Actual Expenditure for the year 1869.		*Actual Expenditure for the year 1870.*		*Estimated Expenditure for the year 1871.*	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Expenses of—						
General Council	... ...	4265 13 9	... ...	4060 11 9	... ...	4000 0 0
Branch Council for England ...	642 9 10		597 18 9		642 0 0	
" " Scotland ...	286 0 7		240 13 0		286 0 0	
" " Ireland ...	295 9 10		287 16 10		295 0 0	
		1224 0 3		1126 8 7		1223 0 0
Total Expenditure ...		5489 14 0		5187 0 4	Estimated Total Expenditure ...	5223 0 0
Total Income		4723 18 7	Actual Income ...	5829 2 10	Estimated Total Income	5215 0 0
Excess of Expenditure over Income		£765 15 5	Balance in favour of Council	£642 2 6	Excess of Expenditure over Income	£8 0 0

the number of registration fees; but it includes also the balance of the Pharmacopœia account, and the proceeds of sales, making together £607 6s., which, by direction of the Council, is now included in the ordinary income. The debt still owing to the Council on account of the Pharmacopœia was reduced in January last to £104 14s.

"The expenditure of 1870 is less by £302 13s. 8d. than that of 1869. The reduction is to a considerable extent due to a diminished charge for printing, especially for printing reports of committees. It is expected that a considerable permanent saving under this head of expense will be effected by an arrangement that has been entered into for printing and binding the 'Medical Register' at a reduced cost, through the agency of her Majesty's Stationery Office.

(Signed) "W. SHARPEY, Chairman."

Dr. SHARPEY moved, and Dr. STORRAR seconded, that the report be received and adopted.

Dr. BENNETT asked what it was proposed to do with the profits henceforth to arise from the Pharmacopœia? would they form a special fund, or go into the general funds of the Council?

Dr. SHARPEY explained that for a time separate accounts were kept; this was found inconvenient, and they were now included in the accounts of the General Council.

The PRESIDENT said it was gratifying to know that the expenses of 1870, although the Council had two meetings in consequence of the Bill then before Parliament, were less than the receipts. The Council was greatly indebted to the Treasurer for the new arrangements they had made with regard to the Register. It was a duty imposed on them by Parliament to publish the Register, and it had been a considerable expense to them. By the new arrangement that expense would be largely reduced, and he had the utmost confidence that the Council would have no difficulty whatever in keeping well within its income.

The motion was agreed to.

Dr. SHARPEY said that after due consideration he had come to the resolution to resign his office as one of their treasurers. He had served in that capacity for ten years, and although it could not be said that the duties were in any way of a compulsory nature, yet he felt that the time had come in which it was expedient that he should resign his share of those duties. He was appointed to the treasurership in succession to the late Mr. Green, when he became president, and he therefore considered it a very honourable distinction. Since then he had had the satisfaction of having for colleagues Dr. Burrows and Dr. Quain, and it need scarcely be said that they had all along acted in harmony. He could not withdraw from his office without expressing his sense of the courtesy with which he had always been treated, and it was a source of great satisfaction to know that they would have no difficulty in appointing his successor.

The PRESIDENT said the office of treasurer was, no doubt, an office of honour, but it was not an unnecessary office. They were, therefore, greatly indebted to anyone who performed its duties so admirably as Dr. Sharpey had done. He proposed—"That the hearty thanks of the Council be returned to Dr. Sharpey for his long and valuable services as treasurer."

The proposition was assented to by acclamation.

Dr. SMITH moved—"That Dr. Bennett be elected treasurer of the General Medical Council."

Dr. PARKES seconded the motion, which was agreed to.

Dr. BENNETT expressed his willingness to accept the office.

REPORT OF THE COMMITTEE ON THE RETURNS FROM THE ARMY AND INDIA MEDICAL BOARDS.

The Committee appointed July 4th to consider and report on the Returns from the Army and India Medical Boards recommend that the following communications be addressed to the Director-General of the Army Medical Department, and to the Major-General, Military Secretary, India Office.

To the Director-General, Army Medical Department.

SIR,—I am directed by the General Medical Council to thank you for the statement with which you have favoured them "of the degrees, diplomas, and licences of the candidates for commissions in the Medical Department of the Army who in February last presented themselves for examination"; and to ask you, should you see no objection, to make a slight alteration in the last column, which, although sufficiently intelligible to a careful reader, might be misunderstood by some.

The alteration I am directed to suggest is, that in future returns the last column headed "Candidates" should stand thus, as may be illustrated by applying it to the present return:—

"Total number of candidates	57
Succeeded in obtaining appointments	36
Succeeded in examination, but not in obtaining appointments, there being only 36 vacancies ...	17
Failed in examination	4
Total	57"

To the Major-General, Military Secretary, India Office.

SIR,—I am directed by the General Medical Council to thank you for the statement with which you have favoured them "of the degrees, diplomas, and licences of the candidates in the Medical Department of the Indian Army who in February, 1870, presented themselves for examination at Chelsea Hospital"; and to ask you, should you see no objection, to make a slight alteration in the last column, which, although sufficiently intelligible to a careful reader, might be misunderstood by some.

The alteration I am directed to suggest is, that in future returns the last column headed "Candidates" might stand thus, as may be illustrated by applying it to the present return:—

"Total number of candidates	23
Succeeded in obtaining appointments	10
Succeeded in examination, but not in obtaining appointments, there being only 10 vacancies ...	9
Failed in examination	4
Total	23"

(Signed) D. CORRIGAN, *Chairman.*

It was moved by Sir D. CORRIGAN, seconded by Dr. PARKES, and agreed to—"That the report be received and adopted, and that the letters drafted therein be signed by the Registrar, and forwarded by him as directed."

REPORT OF THE PHARMACOPŒIA COMMITTEE.

The Pharmacopœia Committee appointed by minute of the Council, July 12, 1869, beg to report that, owing to the pressure of important business during the sessions of the Council last year, no meeting of the committee was held, and no report was prepared for their consideration by Dr. Redwood.

The committee met on the 7th inst., and received a report from Dr. Redwood, on the progress of pharmacy since the date of his last report. Some points of importance in connexion with pharmaceutical preparations were discussed, and Dr. Redwood was requested to continue his services. It was also resolved that Dr. Christison, Dr. Quain, and Dr. Aquilla Smith be requested to continue their inquiries as regards additions or other changes in the Pharmacopœia, and that Dr. Redwood be requested, in addition to his duty of reporting on the progress of pharmacy, to investigate, from time to time, the composition of articles in the Pharmacopœia concerning which questions have been raised.

As the sum of £75 remains as balance in the hands of the committee, it will be unnecessary to ask the Council to place any further sum at the disposal of the committee for use during the ensuing year.

R. CHRISTISON, *Chairman.*

Dr. CHRISTISON said the first paragraph stated why no report was presented last year. In fact, there was but little material to report about that could be presented. But during that year and the subsequent year useful information had been derived from various quarters, and the committee were of opinion that all parties concerned in the Pharmacopœia should now get a stimulus to proceed and look after matters that might occur during the next twelve months. To this, he presumed, there would be no objection. He was happy to say they did not require to come to the Council for any allowance, as there were ample funds at command. There now remained only a debt of £104 14s. The Pharmacopœia had a steady sale, and there was a sufficient number of copies to pay more than the debt. They were not entitled to make any profit from it, but simply wished to reimburse the Council for the outlay.

Dr. QUAIN seconded the motion.

Dr. A. SMITH said that, although a member of the committee, he was no party to the report. He never saw it until it appeared in the programme. He objected to the words "the committee met on the 7th inst., and received a report from Dr. Redwood on the progress of pharmacy since the date of his last report." It was not a report "on the progress of pharmacy"; it was a report from Dr. Redwood on discussions which took place at the Pharmaceutical Society upon a communication made by him at the suggestion of the committee two years ago. There was not a word about the progress of pharmacy; the report was mere waste-paper. He should like to see the report state that Dr.

Redwood had sent in a report to the Pharmacopœia Committee, and suggested that it should not be worded so as to appear that Dr. Christison, Dr. Quain, and himself recommended themselves for re-election.

Dr. APJOHN thought it would be desirable that the committee should furnish the Council with a summary of their researches into pharmacy. It would seem that there had been no researches. Looking at the report it was so much waste-paper, and tended to nothing except to mislead people who were not conversant with these questions into the opinion that experiments were in progress and researches had been made which would render the new edition a great improvement upon the old. If these researches had been made, and these improvements were ready, they ought to be laid before the Council.

Dr. QUAIN believed that the Pharmacopœia Committee had performed its duty as efficiently as the Council could wish.

Dr. A. SMITH.—No; I say, and I said before, that the work has not been done efficiently.

Dr. QUAIN said their duty was simply to take care that an accurate record of what was done in pharmacy was kep', and they had employed for that purpose the services of the gentleman under whose care and auspices the last Pharmacopœia was constructed, a Pharmacopœia which he need not speak of now that it was admitted to be the greatest success that had yet been accomplished in the form of a Pharmacopœia. They gave Dr. Redwood a very moderate payment, and he devoted himself to securing that the new edition should be as good as the last. He (Dr. Quain) had more faith in the opinion of Dr. Redwood than in that of either of the two gentlemen who had just addressed the Council. (Order, order.) He had more confidence in that gentleman's opinion than in that of either of the gentlemen with regard to the construction of a Pharmacopœia. (Hear, hear.) The committee relied on Dr. Redwood to exercise careful vigilance over the progress of pharmacy, and whenever a new edition was required the new materials would be ready.

Dr. SMITH said he did not insinuate one word against Dr. Redwood. He had the highest opinion of him, and was willing to admit his efficiency in every respect. He simply said it was not a report on the progress of pharmacy, and he would repeat the assertion.

Sir D. CORRIGAN suggested that in the next edition, after each article, its degree of solubility in water should be inserted. At present it was simply stated whether it was soluble, and not the degree of its solubility.

Dr. CHRISTISON said he had more reliance in Dr. Redwood than in Drs. Smith, Apjohn, Quain, and himself.

Dr. APJOHN said, that being the case, he would propose that the Pharmacopœia Committee should cease to exist, and that the preparation of the materials for the new Pharmacopœia should be confided to Dr. Redwood.

The PRESIDENT pointed out that the motion could come on when the committee was to be reappointed.

The Report of the Pharmacopœia Committee was then adopted by the Council.

Dr. BENNETT moved, "That the Pharmacopœia Committee of last year, consisting of Dr. Christison, Dr. Quain, Dr. Sharpey, and Dr. A. Smith, be reappointed."

Dr. PARKES seconded the motion.

Dr. APJOHN moved, as an amendment, "That the Pharmacopœia Committee be not reappointed, but that the task of collecting information preparatory to the publication of the new edition of the Pharmacopœia be entrusted to Dr. Redwood."

The amendment was not seconded. Dr. Bennett's motion was then agreed to.

It was moved by Dr. ALEXANDER WOOD, seconded by Dr. HUMPHRY, and agreed to: "That it is desirable that the visitation of the preliminary examinations and those of the licensing boards be recommenced, and that a committee be appointed to consider the best means of doing so."

A committee was accordingly appointed, and the Council then adjourned.

MONDAY JULY 10TH.

The greater part of to-day's sitting was occupied with a consideration of the amended report of the Educational Committee.

Dr. PARKES, in moving its adoption, said that everything had been struck out of it which was not in accordance with the resolutions passed by the Council, and he thought it might be adopted with very little alteration.

Dr. ALEXANDER WOOD said there were several statements in the report to which he objected. One was the statement that "the competition between the colleges still exists, and must produce its fruits." He was not aware that there was any evidence before the Council to show that any competition existed between the bodies in a manner calculated to be injurious to the profession; and even if it were so he doubted the wisdom of introducing such a statement. There was abundant evidence of the anxiety of the bodies to improve their examinations, and such a taunt ought not to be thrown out by the Council. He also objected to the passage "it is impossible that the Government, after introducing the Bill, should let the matter entirely drop." He did not see that impossibility. He hoped the Government would let the matter drop, for they had done no good by touching it, and possibly the bodies might be able to take such steps as would render Government interference unnecessary. At all events it would be extremely foolish to send down to the licensing bodies anything in the nature of a threat. Then he did not approve of the allusion to other persons taking the matter up, and he thought the whole of that paragraph should be omitted.

Dr. THOMSON objected to the words appended to the statement that no changes had been made in the examinations at the English universities, "which were considered satisfactory by the Council." No such reference was made to the examinations of other bodies, and he thought the words should be omitted. It was undesirable to single out certain bodies for mention in that way.

Dr. ANDREW WOOD concurred in the objection. There were similar statements as to the Universities of Edinburgh and St. Andrews having made no alteration, but nothing was said about the examinations being "satisfactory to the Council."

Dr. GULL thought that if there were any examinations that were satisfactory to the Council it was their duty to mention them. They were met for the public good, and ought not to think of sparing any particular institution.

Dr. PARKES thought the words ought not to be omitted. If they were, it might lead to the supposition that the examinations of the English universities were not considered satisfactory.

After some further discussion on this point, a proposal for the omission of the words objected to was put to the Council; and there being an equality of votes, the President gave his casting-vote against the omission.

Dr. GULL, referring to the paragraph respecting pharmacy and therapeutics, objected to the special mention of Dr. Christison and Dr. Aquilla Smith as being in favour of the separate teaching of these subjects. He thought it would be better to omit the mention of any names.

Dr. ACLAND concurred in the objection. After some discussion the paragraph in question was amended, and the names of Dr. Christison and Dr. Aquilla Smith were omitted.

A similar objection was made to the mention of Dr. Harvey's name in allusion to the method of teaching pharmacy adopted at Aberdeen, and the paragraph was modified accordingly.

Dr. ALEX. WOOD, referring to the proposed combinations for the formation of conjoint examining boards, objected to the statement in the report that "The action of the Government in introducing a Bill to carry out the same object, suspended all negotiations of the kind"; and he proposed the omission of the words, "The withdrawal of the Government measure, in consequence of the position on another ground, has replaced matters on the old basis."

Dr. PARKES thought it important to state historically why the negotiations came to an end.

Dr. ALEX. WOOD maintained that matters were not replaced on the old basis.

The proposed omission was adopted by the Council.

After a lengthened discussion, this part of the report was agreed to be amended as follows:—

"The Council will doubtless remember that the Education Report of 1869 strongly recommended the formation of conjoint examining boards, so as to reduce the number of licences to practise from nineteen to three, and to make each licence a qualification in both medicine and surgery;

that the Council authorised circulars to the licensing bodies in this sense, and that in the autumn of 1869 various conferences took place between some of the licensing bodies, and replies were received from many of them favourable to the proposed combinations. Subsequently the action of the Government in introducing a Bill suspended all negotiations of the kind. The withdrawal of that Bill makes it desirable that these negotiations be resumed. It might indeed be argued that the willingness of the licensing bodies to improve their examinations, and the fact that they really have improved them, renders it less necessary to revive the plan of a uniform examination for each division of the kingdom. But a moment's reflection will show that the proposal is still necessary. The independent examinations for licences being as numerous as ever, the risk of inequality of standard in different parts of the kingdom still obtains. This inequality may doubtless be to a certain degree corrected by more constant and systematic visitations, but the only effectual remedy in the opinion of the Council is the consolidation of examinations. In a resolution, which was carried by 17 votes against 1, on the 26th of February, 1870, the Council decided that it was of opinion a joint examining board should be formed in each division of the kingdom. It is, therefore, desirable that the Council should address a letter to each licensing body, transmitting a copy of the resolution of the 26th February, 1870, and urging that arrangements for the formation of the boards shall be undertaken without delay."

In the course of discussion on this subject,

Sir D. CORRIGAN denied the assertion that there were no insurmountable difficulties in the way of conjoint boards, and that in the other divisions of the kingdom enough had been done to show that combination could be carried out if men would earnestly try for it. He said that enough had been done in Ireland to show that it could not be carried out.

Dr. PARKES asked the Council to bear that assertion in mind when it came to consider the necessity of Parliamentary legislation.

Some other minor alterations having been made in the report, it was adopted in its amended form, and copies were ordered to be sent to the several licensing bodies, for their consideration.

Dr. BENNETT complained that unamended reports had sometimes gone forth to the public previous to their discussion by the Council, and of course conveying a very false impression of the views held by the Council. He thought the attention of the Business Committee should be called to this, so that the same thing might not occur in any future sessions.

LEGISLATION WITH REGARD TO CONJOINT BOARDS.

Dr. PARKES moved, "That in case the arrangements for conjoint examining boards are not completed in each division of the kingdom by the close of the year, in accordance with the recommendation of the Council on the subject, the Executive Committee shall be authorised to seek an interview with the Lord President of the Privy Council, and to urge upon him the desirability of such medical legislation in the session of 1872 as may carry out the object the General Medical Council had in view in passing the resolutions of the 26th and 28th February, 1870, and of the 7th July, 1871." He said the Council had already passed a resolution bringing to the notice of the licensing bodies the desirability of forming conjoint boards, and no doubt that resolution was necessary and proper, but in his opinion it would be entirely nugatory, and no conjoint boards would be formed in the several divisions of the kingdom as the result of that resolution. The scheme for a conjoint board for England had progressed most favourably as yet, but though the proposed scheme was in many respects an admirable one, it was impossible to deny that great difficulties still existed. The universities had made it a condition of their joining the board that the board should be a thorough one to carry out all the objects which such a board ought to fulfil. The proposed scheme, however, did not fulfil this condition, for the Society of Apothecaries would still give its licences, and it was quite possible that the universities would say, "Until the board is formed in all its parts we will not give up the privilege we possess of granting licences to practise." The technical difficulties which had been encountered with regard to the Apothecaries' Company might possibly be overcome, but at present it appeared that this could only be done by an application to Parliament. If the Company did not go to Parliament to get a fresh Act, and the Council refused to take such a step, then the conjoint board for England could not be formed. More than this, the Apothecaries' Company would still retain the power of having its graduates or licentiates placed upon the Register, and might demand that the College of Surgeons should admit them to the examination in surgery. If the College of Surgeons refused, the Apothecaries' Company would be obliged to say, "Our licentiates must get their licences in surgery somewhere," and they would either compel the College of Surgeons to admit their licentiates or would make the necessary arrangements with some other body, Scotch or English. He therefore thought that the present scheme for a conjoint board for England would not and could not be carried out. With regard to Scotland, Dr. Christison had said that there would be no difficulties in the amalgamation. Everybody at the Council must have been extremely rejoiced at the announcement.

Dr. ALEX. WOOD.—I think his words were that there were very great difficulties, but that he trusted they might be overcome.

Dr. PARKES said the statement was much more positive,—that he believed the difficulties would be entirely and easily overcome. Even if the difficulties could be overcome it would be a great advantage to Dr. Christison in carrying on the negotiations to have a rod in pickle, and it would very much facilitate matters if there was an Act of Parliament in preparation. With regard to Ireland they knew there would not be a conjoint board formed. In 1869 the Council appointed a committee to confer with the licensing bodies there on various points, and especially on this matter of combination, and as secretary of the first committee, and chairman of the second, he had an extensive correspondence with different persons on the subject, and from what he then learnt he felt absolutely certain that the Irish bodies would not combine. The correspondence he then had reminded him of the movements of some of the meteoric bodies; at first he thought the junction would be an easy matter, then the different bodies rushed like a comet to the sun, but all at once they began to recede into infinite space. (Laughter.) Another reason why he thought a conjoint board would not be formed in Ireland was that Sir D. Corrigan had said with regard to the Irish bodies exactly the opposite of that which Dr. Christison had said about Scotland. He stated that the conjoint board would not be formed in Ireland.

Sir D. CORRIGAN.—I did not say so.

Dr. PARKES said Sir D. Corrigan's expression was that there were insuperable difficulties in the way. Dr. Gull said the other day that he hoped to persuade Sir D. Corrigan, but though, no doubt, his powers of persuasion were very great, there was one thing which he could not do, and that was to convert Sir D. Corrigan. (Laughter.) Charmed he never so wisely, he would not succeed, and if Sir D. Corrigan was not to be converted, no conjoint board would be formed in Ireland. ("Oh, oh.") Sir D. Corrigan had power to prevent it, and he would prevent it. The only way to convert him was by Act of Parliament. (Laughter.) The subject should be looked fairly in the face. Did the Council really want conjoint boards or not? Was the resolution that they had passed intended to be carried out, or to be a mere sham? If it was intended that it should be carried out, they must take into consideration what should be done if the licensing bodies did not act in accordance with it. Would they in that case call upon the Government to introduce a Bill to compel those bodies to form conjoint boards? If this were the step decided on, the Council would have to be summoned, at a great expense, early in the year, for it was of extreme importance that the Council should be in London at the time when such a Bill was passing through the Commons. This course would be a very inconvenient one, and it would be much better to authorise the Executive Committee to act in the matter as proposed in the resolution. The principles of a Medical Bill had been again and again agreed to by large majorities; therefore there was no reason why the Council should meet again to discuss them. The resolution was proposed, of course, on the supposition that the Council intended to do something, but if they let the subject alone they would entirely lose strength, and the initiative which it was important for

them to take in medical reform other persons would then take, and carry a Bill which perhaps the Council might disapprove of. They knew what Bills had been brought forward, they knew the difficulty of the Government and the answer given by Mr. Forster, and they also knew that the power which was pressing those Bills forward could succeed in getting them past a second reading, and probably in carrying them, if the Government had not a proper and well-considered Bill at hand. It was, therefore, absolutely essential for the Council to take the work in hand, if they did not wish it to be done by others who might hold views from which the Council differed.

Dr. GULL seconded the motion. He said no one could doubt the desirability of enabling the student who had acquired a medical knowledge fitting him for practice, to be examined once for all, and so to avoid the expense of being sent about from one body to another. A standard of examination was greatly needed. For measuring the commonest things standards were employed, and surely there should be a standard for intellectual qualification. The only question that could arise was, ought the Council to take action, and, as he thought action should be taken if necessary, he seconded the motion.

Dr. ALEXANDER WOOD moved the previous question. The Council, he said, had already shown, by overwhelming majorities, that they were in favour of the formation of conjoint examining boards, and they had resolved to send out to the various licensing bodies proposals for that purpose, inviting opinions upon them. No man sitting at the Council was more anxious than he to see a certain amount of uniformity introduced into the medical education of the country, but they had been told in very express language that if they did not voluntarily form the boards they were to be coerced into doing so. Was this a wise attitude to assume towards the bodies whose concurrence was asked? Did they suppose that the nineteen licensing boards had no influence in the country, and that if they were told that they would be compelled to amalgamate if they did not do so willingly, they would be more ready to yield to the suggestions of the Council? They had been told in the report that things were all tending to union; but now, when it suited another purpose, Dr. Parkes doubted the expressions in his own report with regard to the success of the efforts which were being made to form a conjoint board in England. However much he wished to see union between the different bodies, there was one thing that he would not sacrifice for it, and that was the independence of the profession. All through the discussions which took place on Lord De Grey's Bill there was a certain section in the Council who, either from not sufficiently looking at the attitude which Government was taking, or from not caring very much about it, were prepared to lay the medical profession under the heel of the Government. The Government had shown, by what they had done with regard to the other educational matters, that they wished to have the whole education of the country put under their control, but he could not conceive anything more disastrous to the education of a free country than the accomplishing of such a purpose. Holding these views, then, he would altogether oppose any proposition that the Council should go to Government, at all events in the present state of affairs, to ask them to introduce any measure of this kind; and, most of all, he would oppose any motion that took the matter out of the hands of the Council and put it into the hands of the Executive Committee. (Hear, hear.) When the Council meet next year, if there is no hope of an amalgamation, and if they are then satisfied that the right remedy is to call upon Government to trample them down, it will be time enough to take the necessary steps. Why should they do it by anticipation? He sincerely trusted that the unions would be effected voluntarily, but, even if they were not, he should consider it a worse thing for the medical profession if they were effected under the compulsion of Government than if they were let alone altogether.

Dr. ANDREW WOOD supported the motion. He said, however high-strained their ideas of the independence of the profession might be, they ought to be prepared to look at circumstances as they really existed. Was it, then, the Government that was pushing on the Medical Bill? Was the Government so very anxious to rule the Council with a rod of iron? He believed that Government would, on the contrary, be very glad to be quit of the subject altogether, but if they remained quiescent other parties would bring forward a Bill in the next session of Parliament. One of the Bills submitted to Parliament during the past session was a most revolutionary one; the other was not quite so bad, but if carried out would produce dangerous results, and do a deal of mischief in endeavouring to do some amount of good. The Government had said, "If a Bill is brought in by private parties we shall give it every consideration;" and it was the duty of the Council to counsel the licensing bodies as to what seemed to be the best plan both for maintaining their rights and at the same time securing the interests of the general public. If licensing bodies held valuable privileges, they only held them in so far as they were consistent with public benefit; and whenever the time came that the interests of the licensing bodies clashed with those of the general public, the existence of those bodies would be in danger. He believed, however, that the interests of both might be harmonised, and that if England, Scotland, and Ireland would go to work with the feeling that the thing was possible they could successfully carry out their object. It was the duty of a wise corporation to endeavour by their own action to do that which it was very possible might otherwise subsequently be forced upon them in a form highly detrimental and destructive to their interests. After what the Council had pledged themselves to last year, they ought not to go back. Above all, they should not show any jealousy of the Government of the country. In all the negotiations which the Council had with the Government last year, instead of attempting to overreach and injure the licensing bodies, and tyrannise over the profession, every member of the Government with whom any communications were carried on was inclined not to interfere with the independence of the profession. He hoped the schemes for the voluntary formation of the conjoint boards would not fail. He did not despair even for Ireland, for he knew that Sir D. Corrigan sometimes said things different from what he perhaps felt. (Laughter.) Irishmen had a *perfervidum ingenium*, and frequently words uttered by them were not so significant as if they came from persons on this side of the Channel. (Laughter.)

Mr. HARGRAVE said he was really astonished beyond measure to hear it stated that conjoint boards could not be formed in Ireland. It was a perfect insult to Ireland. (Laughter.) It was a terrific statement (renewed laughter), and was as utterly wrong as that the other Irish members dared not oppose Sir Dominic Corrigan. (Loud laughter.) He should vote heart and soul against Dr. Parkes's motion. If the Council wished to carry a Bill through Parliament, they should commence in the Commons, and not in the Lords.

Dr. THOMSON suggested that the objections felt to the resolution by some members of the Council might be met by altering the latter part. He would suggest that after the word "subject," instead of the words which at present formed part of the resolution, the following should be inserted: "A meeting of the General Medical Council should be called to consider what steps may be required to secure the object the Council had in view in passing the resolutions of the 26th and 28th of February, 1870, and of the 7th of July, 1871."

Sir D. CORRIGAN said he had always been opposed to the examination taking place before the students were admitted into the several licensing bodies. He was of opinion that the several licensing bodies should be left as they are, that their licences should carry whatever weight they were worth, but he objected to their privileges being taken away, and the examination by the conjoint board being made the first step. A man should first get his degrees, and then, if he wanted to practise on the public, should satisfy an examining board that he was qualified to do so. The test should be applied, just as it was in the army, after the degree had been obtained, in place of being made imperative upon the student before. He had not said that a conjoint board could not be formed in Ireland, but that the difficulties appeared to him to be insuperable, and he did not think the two universities could ever be expected to unite. The College of Surgeons and the College of Physicians had been in communication on the subject since the year 1865, yet no result had been obtained. Dr. Parkes appeared to him to blow at one time hot and cold. In the education report he said, "In the other divisions of the kingdom enough has been done to show that combination

can be carried out if men will earnestly try for it"; and towards the close of the report he said, "It is therefore desirable that the Council should address a letter to each licensing body, transmitting a copy of the resolution of the 26th of February, 1870, and urging that arrangements for the formation of the boards shall be undertaken without delay." Was he jesting with the Council when he brought forward that report, for he had now satisfactorily proved that not the slightest importance was to be attached to it. In the report he stated that the conjoint boards could be carried out with very little difficulty, but now he was of opinion that they could not be carried out at all. He (Sir D. Corrigan) was strongly opposed to delegating the functions of the Council to the Executive Committee, for if the Executive Committee were authorised to seek an interview with the Lord President of the Privy Council, and urge upon him the desirability of legislation in the session of 1872, it was evident that the Council would be placing themselves entirely in the hands of the committee, who might make whatever representations they pleased. The object of the resolution was neither more nor less than to place the Council tied hand and foot in the hands of the Executive Committee. The proper course was for the Council themselves to draw up a Bill, and let it go forth as the Bill of the General Committee of the Council. He would never agree to give their powers and privileges into the hands of the Executive Committee, and then pass the Bill over to the Government. When did the Government ever show any consideration for the medical profession? Dr. Parkes had said there was a rod in pickle for them, but this language of terror and threat had been employed too often before, and by Dr. Parkes more than by any other member. The threat had been held out that the Government would do whatever they liked with them, but the Government should not do whatever they liked with them. Above all things, the Council should not trust to the law adviser of the Privy Council, or any lawyer, to draw up a Medical Bill. With the experience of the Lunacy Bill before them, the Council would do well to keep their powers and privileges in their own hands.

Dr. BENNETT said if the resolution was likely to, or could by any possibility, do anything of the kind that Sir D. Corrigan had represented, he should vote against it; but it would confer no such authority on the Executive Committee. It simply proposed that, in case the conjoint boards were not completed before the end of the year, the Executive Committee should have power to tell the Lord President that; and then it would be necessary to take further steps. The Council would be altogether stultifying itself if some such resolution was not passed. It was imperative upon them, for their own good name's sake, to show that they were in earnest in the resolutions they had passed. Surely there was nothing unreasonable in stating that if voluntary efforts failed to form the conjoint boards by the end of this year, then it would be necessary for Government to intervene. Otherwise they would be treating the resolutions they had passed as immaterial, and would show that they thought it mattered little whether or not they were carried out. He had no fear that the Government would do anything that the Council did not generally approve of, nor was he at all afraid of any private body outside the Council bringing forward any Bill which would have the smallest chance of passing the House of Commons without the approbation of the Council. He did not believe the Government would support such a Bill for a moment. He therefore trusted the Council would not stultify themselves by refusing to pass some stringent resolution which should show that they really meant to have legislation on the subject if voluntary efforts did not succeed.

Dr. ALEXANDER WOOD withdrew his amendment (with the permission of the Council), and substituted for it, "That a meeting of the General Medical Council be held early in 1872 to receive the proposals of the bodies for conjoint examinations, and to consider whether any and what steps should be taken to carry out the resolutions of the Council in favour of such combinations." He said the schemes for conjoint examinations could not be completed without the sanction of the Council, and therefore the Council might meet at the beginning of the year to receive the proposals, and then, if no plans had been carried out, they might consider what steps ought to be taken.

Dr. AQUILLA SMITH suggested that the motion should be modified by adding the words "and to report to this Council" after the words "Privy Council." (No, no.)

The PRESIDENT said he thought some of the remarks had been rather hard on Dr. Parkes's motion. It did not propose that the Council should put itself into the hands of the Executive Committee, for it limited the action of that Committee to urging upon the Government the desirability of carrying out legislation in accordance with the resolutions of the Council. The Committee would have no right to do anything beyond advising the Government on these particular points. He was, however, satisfied with Dr. Alexander Wood's amendment.

Dr. PARKES said he would willingly adopt the amendment did he not see two or three very strong objections to it. In the first place, unless the Government knew beforehand that a Medical Bill was to be brought in by the Council, there would be no chance of passing one next session. The bodies would not send in their proposals until the end of the year; the Council would then have to be summoned, which could not be done under a fortnight, and therefore the meeting could hardly take place before the end of January. They would then discuss that which they had already over and over again discussed, and when they went to Government about the beginning of February the answer would be, "We cannot attend to this business now." This course, too, would be a very expensive one. To make the meeting of the Council of any value at all, it should be after the Bill had been drawn by the Government draughtsman. By the resolution which he proposed the Executive Committee were merely authorised to carry out three resolutions, which had already been passed by the Council, and nothing more. It was an extremely simple plan; it only required one interview with the Lord President, and it put the Council to no possible expense.

On a vote being taken the amendment was agreed to, eleven supporting it, and five voting against it. The amendment then became a substantive motion.

Dr. PARKES asked if the proposer and seconder of the amendment had considered what was to be done if there were no proposals at all sent in from the licensing bodies? If the amendment were carried out the Council would, in that case, meet for nothing.

Dr. STORRAR said, if no proposals were received the Council would be able to take such steps as were necessary to obtain parliamentary powers.

Dr. APJOHN agreed with Dr. Parkes that there would be no agreement among the licensing bodies in Ireland; but if any Bill were brought forward, he thought the Council should have the constructing of it.

The motion was then agreed to.

REPORT OF THE COMMITTEE ON REGISTRATION.

The Committee on this subject appointed on the 8th inst. beg to report—1. That in their opinion the time has now come when an interchange of visitors between the three Branch Councils would strengthen confidence in the visitation, and would tend to assimilate the character of the examinations of the various boards. 2. That, with the view of carrying out the resolution of the Council of the 8th of July, a Committee of Visitors be appointed to make arrangements what examinations should be visited and for carrying out the visitation. 3. That the Committee of Visitors consist of eight, four to be elected by the English Branch Council, and two by the Scottish and Irish Branch Councils respectively. 4. That each examination reported on shall be visited by a due proportion of members of the Branch Councils, other than the one in that division of the kingdom where the examination is conducted. 5. That it is not desirable that visitations should take place in the case of those examining boards with regard to which it shall appear to the Visitation Committee that there is a reasonable prospect of a conjoint examination being formed.

This report was referred to the Executive Committee.

The usual formal and complimentary votes having been passed, the session terminated.

HER MAJESTY has given £100, and the Fishmongers' Company £50, towards the completion of the National Sanatorium for Consumption and Diseases of the Chest, Bournemouth. Mr. Thomas Proctor has given £100 towards the extension of the out-patient department of the Bristol General Hospital.

THE LANCET.

LONDON: SATURDAY, JULY 22, 1871.

THE Report of the Contagious Diseases Commission is a very able document. The causes that led to the introduction of measures for limiting the spread of contagious diseases, the history of the legislation that has been undertaken with that object, and the facts connected with the working of the Contagious Diseases Acts, are admirably set forth; and the reasoning is to our minds conclusive. The facts and the reasoning are utterly antagonistic to the cause which the "abolitionists" have at heart. The Report speaks with no uncertain sound. It is to some extent a compromise, no doubt, in consequence of several members of the Commission not having had the courage to follow out their reasoning to its logical conclusion. The Commission had to consider what was attainable; and it is ready to sacrifice something of what is desirable in order to secure it. We have held pertinaciously to one line of conduct in the matter of these Acts. The objects to be attained we deemed of paramount importance to all classes of society; and we held the attempts at legislation to be correct in principle and essential for the protection of innocent people from the effects of diseases against which they were powerless to guard themselves. We see no reason whatever to deviate from our course now; on the contrary, we are convinced that the perusal of this Report will satisfy all impartial minds that it has been, on social, moral, and religious grounds, the best and most practical one that could be followed. It is notorious that the opponents of the Contagious Diseases Acts have been agitating in every direction and by every conceivable means to get these Acts repealed. They have condemned them as vicious and demoralising in principle, and little short of abominable in practice. Regardless of accuracy, they have not hesitated to put forward any statements that would tell against the Acts or the officials engaged in carrying them into operation. By dint of organisation they have made their power felt by opposing the return of anyone to Parliament who would not forestall the judgment of the Royal Commissioners, and yield to the clamours of ignorant and irresponsible persons. The agitation was conducted with a view to victory; and the publicity given to the question, as well as the way in which some of its details were discussed in handbills and other publications, did an incalculable amount of evil. Even up to the latest moment the opponents of the Acts were true to their tenets. They promulgated versions of the Report of the Commission in the daily journals that were at variance with fact. We are entitled to ask them to match the amount of good that has been accomplished by these Acts which they condemn as utterly demoralising; and we may fairly challenge earnest, religious, or philanthropic persons to show similar results, or anything like them, among the same class of persons, by any organisation or scheme that they have put in practice. It ought not to be forgotten that persons who declare that the provision of the requisite hospital aid is all that is required, are pronouncing their own condemnation,—for why have they failed to afford this?

The Report tells us that public meetings had been held in several large towns and other places, at many of which inflammatory statements were made as to the character and operation of the existing law. "Most of these statements, so far as they had any foundation whatever, were perversions of the truth." Alluding to the charges of misconduct and negligence on the part of the police, "which were among the means adopted by some of the opponents of the Acts to bring them into public odium," the Commissioners declare that they have made inquiry into every case; and the result has been to satisfy them that the police are not chargeable with any abuse of their authority, but that they have, on the contrary, discharged a novel and difficult duty with moderation and caution. We need not allude to the opinions of men like Mr. PAGET, Sir WILLIAM JENNER, and Mr. PRESCOTT HEWETT, as to the amount of damage that syphilis inflicts on the population. The statistical evidence furnished by the naval and military services leaves not a shadow of doubt in our minds that the amount of this disease has been vastly diminished, and its nature modified, by the operation of these Acts. This is shown in the most striking manner by Dr. BALFOUR'S tables, by which it will be seen that the syphilitic form of disease has undergone a steady and progressive decrease at the stations under the Acts, while, on the other hand, no such diminution has presented itself in the unprotected group of stations. Dr. BALFOUR, not being proof against conviction, has had the candour and courage to avow his change of opinion in regard to these Acts, especially with reference to the periodical examinations. It is not only that a great diminution has taken place in the amount of disease, but the Contagious Diseases Acts have, "both directly and indirectly, promoted the objects of sanitary and municipal police." The good moral effects produced by the calumniated Acts are such as to far outweigh any moral objections that have been or can be urged against them. The memorial to the Secretary of State, bearing the signature of F. W. NEWMAN, is disposed of by the Commissioners in a few sarcastic sentences which only convey the reproof that it so richly deserved. The document is regarded as beneath criticism and notice, except for the respectable credentials that it bears; and the Commissioners declare that it reads more like a vindication of the rights of prostitution than a grave argument against the Acts on moral and political grounds.

The Commissioners, although they seek to return to the Act of 1864, and to abandon the compulsory periodical examinations, recommend the adoption of some important amendments and additions to the existing law. They fully allow that the system of periodical examination is the most effectual mode of dealing with venereal disease, although they consider that it would be practically impossible to make the system general, even if on other grounds it were desirable to do so; but they are very far from advising the repeal of the Acts. "We attach," they say, "great importance to the maintenance of a system which, if it cannot altogether annul, may at

least materially mitigate, a pestilence, which is not, like other contagions, of occasional occurrence, but one of perennial growth. The offenders, who bring this affliction upon themselves by their own vicious indulgence, may have no claim to the compassionate care of the State; but the numerous innocent persons who suffer from the disease are surely entitled to consideration. We venture to express our hope, therefore, that while due consideration is paid to the sentiments of the people in regard to prostitution, no misapprehension as to the real moral bearings of the question, and no want of courage, will be suffered to prevent the application of such remedy as may be practicable to this great evil. The firmness of a former Parliament withstood the storm of clamour with which the discovery of vaccination was assailed by the ignorance and prejudice of the day, and relieved posterity from a scourge which was the terror of earlier generations; and we would fain hope that an attempt to stay the progress of a plague scarcely less formidable in its ravages is not to be hastily abandoned."

A man, said Dr. JOHNSON, must be in advance, and but little in advance, of his generation to be what is popularly regarded as a great man. This is still more applicable in the case of Governments than of individuals; for it is not possible, apparently, to legislate in advance of public opinion. Statesmen can no longer originate measures, but the impulse has to come from without; and it too often happens that a Minister, in submitting to the pressure of so-called public opinion, has, in fact, been yielding to the clamour of a minority whose noise is out of all proportion to the number, earnestness, or legitimate influence of those composing it. How much time and labour have been fruitlessly spent in endeavouring to frame and carry measures affecting the sanitary and social aspects of society! While we are congratulating ourselves that we are not as other nations are, and boasting that we enjoy a liberty under our constitutional form of Government which is wanting to them, we must not lose sight of the increasing difficulties that beset legislation in this country. It was, no doubt, under the influence of such considerations as these that a late distinguished personage boldly averred that representative forms of Government were on their trial; and he was popularly regarded as having uttered a sort of political heresy. We have confidence, however, in the power of the truth to assert itself and win in the long run, the opponents of the Contagious Diseases Acts to the contrary notwithstanding.

THERE are still two or three subjects of great moment in connexion with the Medical Council and its recent meeting which deserve some notice at our hands. We have already commented on the discussion of the report of the Education Committee. This Committee has been in existence two or three years, and has now ceased to exist. It has not been reappointed. The fact is that the Council showed a decided unwillingness to interfere in the details of medical education further than to urge more and more that it be real and practical, and of a nature to keep students in connexion with the actual facts of physiology, on the one hand, and of disease and its treatment, on the other. The wisdom of this feeling will be generally admitted.

It is very desirable, for the sake of the usefulness of the Medical Council, that the present agitation for the improvement of our examining system should be satisfactorily terminated. An illustration of the working of the present state of uncertainty was afforded by the report of the Pharmacopœia Committee. The Council has no duty more important than that of perfecting the Pharmacopœia by carefully noting every step of progress in pharmaceutical and therapeutical science. It is not of course to be recommended that there should be frequent changes in the Pharmacopœia. But it cannot be completely developed unless there be constant attention on the part of the Pharmacopœia Committee to the subjects involved in the preparation of the Pharmacopœia. It will surprise our readers to learn that during the past year there has not been one meeting of the Committee; and that all that has been done by that Committee has been, during the sitting of the Council, to receive a report on the progress of pharmacy from Dr. REDWOOD. Dr. APJOHN, with not unnatural severity, moved that the Pharmacopœia Committee be not reappointed. We have the highest respect for Dr. REDWOOD and his knowledge of pharmacy; but surely a General Medical Council, with an income of nearly £6000, should have done more for the advancement of pharmacopœial knowledge than is implied in receiving a mere report from Dr. REDWOOD, who views medicines chiefly from the pharmaceutical point of view. The excuse for the inaction of the Pharmacopœia Committee is the pressure of important business during the two sessions of last year. This business consisted in long discussions on the amendment of the Medical Act. The Medical Act is still unamended, and until it is amended and the anomalies of our present licensing system are remedied, the Council is likely to do little of the higher work that would command for it the respect of the profession.

The income of the Council in 1870 was £5829 2s. 10d., and the expenditure £5187 0s. 4d. It is satisfactory to notice that, instead of an excess of more than £700 in the expenditure over the income, as in the previous year, there was a balance in favour of the Council of £642 2s. 6d. Still the question must press—do we get £5000 worth out of the work of the Council? We will leave the Council and the profession to answer that question.

The Council, on the motion of Dr. ALEX. WOOD, agreed that it was desirable that the visitation of examinations be recommenced. We all remember the interchange of friendly visits which took place in the different divisions of the kingdom two years ago between the members of the various licensing boards. No doubt some good was done; but it was only the minimum of good. What the Council should have done at its late meeting was to appoint perfectly independent inspectors, to visit in the course of the year all the examinations of the kingdom, and report on them with minute and impartial criticism. No doubt this would have cost money; but the Council has money, and what it wants is credit for spending it well. Instead of this, it spends it all upon itself. It keeps itself to itself. It subjects itself to no independent criticism, and hence it satisfies nobody. We shall probably hear no more of it till the beginning of next year, when the Council will meet for

another week to discuss another Medical Bill. A few civil reports of pleasant visits to examinations will be read; £5000 more will be expended; and all other things will remain as they are till the year after—including, very possibly, the nineteen examining bodies.

WE had occasion some time ago to call attention to certain experiments undertaken by Dr. FLINT, of New York, on the person of a well-known pedestrian, Mr. WESTON, with a view of obtaining some information with regard to the effects of exercise on the metamorphosis of muscular tissue. A much more favourable opportunity of pursuing these investigations recently presented itself in the case of the same gentleman, who undertook for a wager to walk the prodigious distance of 400 miles in five days, and on one of those days to walk 112 miles in twenty-four hours. On the present occasion Dr. FLINT was fortunate enough to obtain the assistance of an excellent staff of coadjutors in carrying out a plan that was most carefully laid down before the trial began, and Mr. WESTON good-naturedly lent all the aid in his power to render his severe undertaking trustworthy as a scientific experiment. The observations were made during three periods—namely, for five days before the walk, for the five days of the walk, and for five days after the walk. Each day, as nearly as possible at the same hour and under the same conditions, the naked weight, pulse, respiration, and temperature were taken. Mr. WESTON made his own selection of food, both as to quantity and quality; the weight being ascertained by supplying a known quantity and weighing the remainder, so that there was no kind of restriction exercised. The urine and fæces were carefully analysed, with a view of determining the amount of nitrogen eliminated. The analyses were made by Mr. LOEW under the superintendence of Mr. DOREMUS. It may be as well to state that Mr. WESTON lost his bet, accomplishing only 317½ miles in the five days—namely, 80 miles on the first day, 48 on the second, 92 on the third, 57 on the fourth, and 40½ on the fifth. Mr. WESTON can scarcely be said to have pursued any fixed plan of training. He drank no alcohol and did not smoke during the walk. He is a man of slight build, with powerfully developed extensor muscles of the thigh, small calves, and well-made, highly arched feet. His condition does not appear to have been first-rate at starting, as we are told the urine he passed was loaded with crystals of oxalate of lime, and that he exhibited great sensitiveness to disturbing things during the whole of the walk; and we can scarcely imagine anything more unfavourable to the success of a great feat of pedestrianism than that it should be performed by monotonously walking round and round a building as large again as Westminster Hall. The immediate cause of the failure appears to have been want of rest and sleep on the second day, producing extreme drowsiness and vertigo on the third and fourth days, from which he partially recovered on the fifth. During the walk he lost 3·450 lb., and eliminated 633·80 gr. more nitrogen than he consumed. The question is, In what did the loss represented by these figures consist? An attentive consideration of the analyses and tables given by Professor FLINT, which are very numerous and lucidly arranged, inclines us to support the conclusion at which he has arrived—that excessive and prolonged muscular exertion increases enormously the excretion of nitrogen, and that the excess of nitrogen discharged is due to an increased disassimilation of the muscular substance; in other words, that during muscular effort muscular substance is used up. This view is strongly supported by the fact that for the five days prior to the walk the elimination of nitrogen by the urine and fæces (which Dr. FLINT estimates at 95 per cent. of the whole quantity excreted) amounts to 89·49 parts for every 100 introduced by the food; whilst during the walk, for every 100 parts of nitrogen introduced, no less than 235·63 parts were eliminated; and for the five days after the walk the average amount excreted was 91·93 parts for every 100 parts, the weight at the same time quickly regaining its normal standard. The excess during the period of violent exertion would, viewed in connexion with the loss of weight, probably come from the muscles—though partly also from the nervous system. His temperature failed considerably on the first day, being about 4·3° Fahr. below the average, and remaining lower throughout the walk. There did not appear to be any relation between the amount of exercise and the amount of uric acid discharged. There was an increase of 50 per cent. in the phosphoric and 30 per cent. in the sulphuric acids during the walk, as compared with the previous period of rest. The chloride of sodium, on the other hand, was diminished during the walk.

Dr. FLINT'S able and most interesting paper is published as a separate pamphlet, but may also be found in the June number of the *New York Medical Journal*; and we commend it to physiologists as being well worthy of close attention from the precision of its details and its important bearings on an obscure and difficult department of inquiry.

THE medical evidence given in the case known as "The Bayswater Tragedy" is well worthy of the attentive consideration of every medical man. The fact that the gentlemen composing the jury found the prisoner guilty of manslaughter, after only half an hour's deliberation, shows how little trouble they experienced, after listening dispassionately to all the facts detailed by the witnesses, in coming to a conclusion as to the merits of the case. The facts which have a medical interest were these:—Mr. MOON received a wound, of which he died. This wound was situated under the left arm, was five inches long, and followed the course of the sixth intercostal space. It was a clean-cut wound, and was made with a poultry carver, having a blade three-quarters of an inch wide. The point of the knife had taken an upward direction, and had wounded the apex of the heart. Nine medical men gave their opinions respecting the wound. All agreed that the wound was not suicidal, and that a second person had been in some way or another instrumental in inflicting it. The question then arose as to whether the prisoner did or did not intend to wound Mr. MOON when she took the knife into her hand. All agreed that it was physically possible for such a wound to be made accidentally *by a second person*; but while the medical men called by the prosecution thought that the wound was *probably* the result of a deliberate stab,

those called for the defence thought that *probably* it was the result of a pure accident. The medical witnesses who were called for the defence were asked to speak solely on a matter of relative probabilities.

TAYLOR, speaking of the inferences to be drawn from the appearances of wounds, alludes to a case in which the medical witness admitted it was possible that the deceased had produced a wound on herself, and in answer to a question by the learned judge he thought it *probable*; and he remarks upon the fact of it being a new feature in cases of the kind to have the question of *probability* introduced. When a medical man has admitted that a wound may have been self-inflicted, he has gone as far as professional knowledge will admit. Here, then, is a tolerably decided opinion from the greatest authority we have on medical evidence. In the Bayswater case, one of the witnesses called for the defence admitted that, "judging from the medical evidence alone, there was nothing to show that the wound was more the result of an accident than a blow." The evidence of this person, as a skilled medical witness, was consequently simply negative. Whether he was better able to draw just conclusions from circumstantial evidence than the jury themselves was a question which the jury themselves decided. Another witness for the defence "had strong reasons for believing that the wound might have been caused by a struggle." A third said "there was nothing unreasonable or improbable, so far as the medical evidence was concerned, that the wound was the result of a stab by the prisoner"; and a fourth thought the wound was most probably accidental because it was not jagged; "if there had been the slightest movement the wound would have been jagged." Now here we have a wound five inches long made by a knife with a three-quarter inch blade. It is evident that the knife must have moved along the wound, or the wound along the knife (supposing the knife to have been fixed), for a distance equal to more than six times the width of the blade; and we know as a matter of fact that the wound was not jagged. After reading the evidence of the witnesses, we are at a loss to conceive why the counsel for the defence thought it advisable to call them. Their evidence proved nothing; they did not help the prisoner's case in the least degree; and the theories which they started had all been admitted as possible by the witnesses for the prosecution. As far as we can see, they merely forestalled the jury in drawing inferences from the circumstantial evidence. In fact, the medical witnesses on both sides, beyond being able to speak positively as to the possibility or impossibility of the wound being self-inflicted, ought not in our judgment to have assumed the functions of the jury, because the probabilities must necessarily be determined by other circumstances than the form or direction of the wound.

THE proposed establishment of a Local Government Board forms the first step of a reform which will be found eventually to affect the happiness and prosperity of the people far more than the great political and military questions which are now absorbing the public interest are likely to do. Hitherto all the efforts of legislators to improve our social organisation have been of the most desultory character. We commenced less than a century ago to take the Census; a generation afterwards we began to register births and deaths; and now, feeling the inadequacy of the information thus obtained, we are considering the propriety of registering disease. But a difficulty intervenes. The officers who have the best opportunity of sending information are subject to another branch of the Government, and can render no assistance to the Registrar. Such is the confusion that, whilst the Registrar-General appoints his own officers, their salaries are charged upon the Poor-rate, the expenditure of which is supposed to be superintended by the Poor-law Board. Again, we have found it necessary to introduce compulsory and gratuitous vaccination; and, for want of any better organisation, the principles and action of the law are superintended by the Privy Council, and the contracts are made under the auspices of the Poor-law Board. If an epidemic of cholera or fever should break out, we are at present supposed to have a double system, one for the paupers and the other for the independent poor. This system breaks down on one side or the other as soon as it is called upon to meet an emergency. Either the independent poor are sent to the pauper hospitals, as they have been during the whole of the small-pox epidemic in London and Liverpool; or the paupers have been sent to the hospitals for independent people, as in Glasgow and the parish of St. Luke's, Middlesex. And what is more extraordinary, although these hospitals are respectively under the supervision of the Poor-law Board and the Privy Council, they are for the most part managed by the same gentlemen, acting in the capacity of guardians or vestrymen, and the expenses of both hospitals are paid from the Poor-rate. The health of the whole community is supposed to be placed in charge of the Privy Council, but its inspectors are forbidden to enter workhouses which are in charge of the Poor-law Board. It became also necessary to put an end to intramural burial, and so a board of indefinite character was formed, having relation with no other board. Then came the question of Building Acts, bye-laws, sewerage works, town improvements, and borrowing powers; and it became necessary to add to the list a Local Government Act Office, with a fresh staff of inspectors, clerks, officials, &c. With so many different boards, it is often a real difficulty to select that which is most suitable for the superintendence of any new reform. It was a chance whether baths and washhouses should go to one, or town improvements to another; and sometimes, as in the case of vaccination and registration, the management was confided half to one department and half to another. These are the evils which Mr. STANSFELD's useful measure is intended to put an end to, and we will discuss its positive advantages in a future article.

WE have before us the list of members of the College of Physicians nominated by the Council for election as Fellows at the forthcoming general meeting of the College; but, following our usual custom, we refrain, for obvious reasons, from publishing the names. There are seven metropolitan physicians out of the fourteen gentlemen nominated. Four of the fourteen possess Oxford, two Cambridge, two London, three St. Andrews, one Aberdeen, one Dublin, and one Berlin degrees.

Medical Annotations.

"Ne quid nimis."

THE COLLEGE OF SURGEONS ELECTIONS.

THE annual elections by the Council of the College of Surgeons last week show that that body has as yet but little inclination to move out of the accustomed grooves. The election of Mr. Busk as President may have been in some sense in deference to the action of the Fellows who returned that gentleman a week before; but, in the interests of the College, we regret that either Sir William Fergusson's tenure of the chair was not prolonged for another year, or that another prominent member of the Council was not selected out of his turn to represent the College before the public.

The re-election of the Midwifery Board is another illustration of the conservative practice of the Council. Dr. Barnes and Dr. Priestley have only served five years, and might therefore reasonably ask for re-election so long as the members of the Court of Examiners are themselves allowed to hold office for ten years. But Dr. A. Farre has enjoyed the sweets of office for close upon twenty years, having formed one of the original board constituted in 1852; and it appears to us unfair to other gentlemen who practise the art of accouchement that a gentleman who may be presumed to have got all he can out of the office should so persistently occupy it.

The appointment of Mr. T. Holmes to the Professorship of Surgery and Pathology we are glad to welcome as an evidence of the desire of a majority of the Council to allow the younger members of the Corporation to raise their voices within their own College. The appointment of Professor Humphry to the Lectureship on Anatomy and Physiology we look upon as less satisfactory, because Mr. Humphry is himself a member of the Council, and must have his time so much occupied by his numerous public duties at Cambridge and elsewhere, as to leave little time for the preparation of original courses of lectures. Nevertheless, we anticipate that both the new professor and lecturer will do their best to discharge the important trusts which the Council has confided to them.

THE VOLUNTEER CAMP AT WIMBLEDON.

WE have great pleasure in being able to say that the volunteer camp of 1871 has very little special interest for the medical profession. The rudest health seems to reign supreme there. The medical arrangements are under the superintendence of Surgeon-major Wyatt, Assistant-surgeon Temple, V.C., and Dr. Mayo, of the Inns of Court R.V.; and it was owing to the great courtesy of the last-named gentleman that we were enabled to see what little there was that was likely to prove of interest to our readers. Since the establishment of the camp there have been on an average 2600 men living under canvas, not one of whom has been obliged to be sent away owing to sickness or accident. There have been only a very few cases of diarrhœa. This speaks well for the commissariat department, which this year is under the direct management of the camp authorities. There have been a few cases of rheumatism of a trifling nature, and when we visited the camp there were three cases in hospital, — a man who had bruised his knee, a waiter who had cut his hand with a soda-water bottle, and a private of the Guards who had come to the camp suffering from pneumonia, and was getting rapidly better. The hospital tents, which differ from the ordinary tents only in having a double instead of a single canvas covering, are most charmingly situated on the top of a slight elevation facing the south-east, and commanding an extensive view of the neighbouring country. The latrines, of which there are altogether half-a-dozen in the camp, are all constructed so as to carry out Moule's dry-earth principle, and notwithstanding the very wet weather which has prevailed during part of the time, they have acted invariably well, and have not proved in the least degree offensive. We were enabled to inspect two of the ambulance waggons which have been presented to the English Society for the Relief of the Sick and Wounded by the Société de Secours aux Blessés, and the Ambulance de la Presse. These waggons do not differ materially from other waggons constructed for the same purpose. They are four-wheeled waggons, each made with two stories, constructed to receive four or five wounded men. They seemed to have the faults of ambulance waggons in general, no arrangements being made for guarding the wounded men from jolts and jars; and assuredly a man with a compound fracture travelling in one of these over a rough road would suffer cruelly. The two waggons differed slightly from each other in detail; and, if we may be allowed to do so, we should give the preference to the Presse ambulance as being on the whole the more convenient of the two.

We had an opportunity also of looking at a couple of specialities which have been brought out by Messrs. Anderson and Abbott, with a view to meeting the requirements of officers who propose accompanying the autumn flying column. One of these, the regulation valise, is very ingenious, and would, we should fancy, prove invaluable to the possessor of it. It is a double-skinned waterproof sheet, with a bolster-like bag at one end. When on the march the officer's goods and chattels, which have all been constructed with this end in view, are packed in the bag, and the waterproof sheet is wrapped round them; but at night, the sheet being unrolled, and hay or straw being stuffed between the skins of the waterproof and into the bag, a capital mattress and bolster is formed, on which a tired man may sleep with the greatest comfort. The "regulation waterproof cloak" is simply a waterproof Inverness cape. There were three kinds of mattresses for the use of the sick and wounded being exhibited at Wimbledon. One was the wire-woven spring mattress, of which St. Thomas's Hospital possesses some excellent specimens, and which we should think would form a first-rate mattress for hospital use; another was an extempore mattress, formed by packthread laced across a wooden frame; and a third was a mattress stuffed with horn shavings. This, as we understood, was made in Paris during the siege, when straw was not procurable. Horn shavings are very springy and elastic, and seem to answer the purpose to which they have been put excellently well.

A SENSIBLE EMPEROR.

WE wish we could think there was some chance that London society would follow the example of early rising which is being set it by the Emperor of Brazil. It is positively refreshing to read of his Majesty's morning drives to the pleasant suburbs of London. There are few persons who read the paragraphs which daily give us the details of these excursions who do not ejaculate "How very sensible!" and yet how powerless we all are to follow the Emperor's example. We fear there is little chance of our keeping better hours as long as the leaders of society give their breakfasts at 4 P.M., their dinners at 9 P.M., and their dancing parties at midnight. Society has got into a well-worn groove, and there we fear it must stop till someone who can be seen by all shall demonstrate that there are other and far pleasanter and healthier grooves in which it may run as smoothly as at present. During the London season

the sun rises at 3 A.M. and sets at 8 P.M. There are seventeen hours of daylight and seven of darkness in the twenty-four, which the votary of fashion utilises thus:—He rises a little before noon, and spends the time till dinner in riding, driving, luncheon, pigeon-shooting, and afternoon tea. At 9 P.M. he dines, and then is content to be immersed in an artificially heated, stifling atmosphere till daybreak, when he retires to bed, and, managing by means of shutters and curtains to keep out the light and other disturbing influences, is enabled to get a few hours' slumber before it is time to tramp once more on the inexorable treadmill of fashionable enjoyment. Thus the fashionable day is divided into eight hours of hot daylight, and seven of hotter gas-light. Why does not some great personage issue cards for a series of breakfasts at 7 A.M.? Why cannot we imitate the customs of the German baths, and have a band playing in the park, and the Row crowded while the day is cool and pleasant? and why cannot the opera begin at six, as it does at Berlin and Vienna?

We feel certain that if the Emperor of Brazil's example were generally followed it would have a most marked influence on the health of especially the younger members of the upper ten thousand. Mammas would see their daughters looking as well in July as they did in April, and not worn out and anæmic, martyrs to headaches and neuralgia, and forced to resort to all manner of artifices for the preservation of their complexions and their spirits.

DEATH-CERTIFICATES.

IT seems that the latest forms of medical certificates of causes of death issued by the Registrar-General for professional use do actually provide for such a modification of the degree of positiveness with which the cause of death is stated as in some respects to meet the difficulty attendant upon giving a certificate under circumstances where probability has to take the place of absolute knowledge. A book of these new certificates is now before us. It is dated 1871, but we suspect that it has not as yet had much circulation, for the fact of the form having been modified does not appear to have been known to the Medical Council when Mr. Kempster's case was under consideration the other day. The new form provides for the insertion of the words "to the best of my knowledge and belief" before the statement of the cause of death, and is so far an improvement on the old form.

We assume, of course, that the Registrar-General has duly apprised his registrars of the change thus introduced, and that the instructions, under which they have been acting for the last two or three years, to treat as "not certified" all cases in which practitioners had inserted such words as he has now sanctioned, have no longer any force. It would be instructive to know what the proportion of deaths registered as "not certified" has been during the period since he issued those instructions, against which we at the time protested.

We have further to remind the Registrar-General that the form even as modified does not entirely meet the views of the profession, inasmuch as it still requires the certifier to state absolutely facts of which he can in many cases have but relative knowledge. As we have urged before, we repeat now, that the *age* of the deceased, and the fact of death having taken place at a *specific time*, are matters quite apart from the actual or probable *cause* of death, and should be left entirely to the registrar to verify. If they must have a place on the medical certificate form, in order to facilitate identification, they should either stand apart as subsidiary statements of probability, or be included within the terms of the certificate in a manner to show what degree of knowledge the certifier has of them. In THE LANCET of June 27th, 1868, we suggested a form of medical certificate making provision for three classes of cases: (*a*) where the practitioner is present at the death; (*b*) where he only sees the body after death; and (*c*) where he was in attendance prior to the decease, but is not present at the death, nor sees the body after death. Dr. Farr, in the Registrar-General's Twenty-seventh Report, recommended separate forms of certificate to meet two of the above contingencies; but we remain of opinion that a single comprehensive form, as proposed by us, would be preferable in every way, and we should be glad to see it adopted in the promised amendment next year of the Registration Act.

THE METROPOLIS WATER BILL.

THE progress of this Bill before the Select Committee appears to be developing an amount of boldness on the part of the water companies which, if not met by the most strenuous opposition of the Metropolitan Board of Works and of those whose duty it is to protect the public interests in the House of Commons, will result in the inhabitants of London being left in a worse position with regard to water-supply than they are in now. It was stated at the last meeting of the Metropolitan Board that the counsel for the companies had handed in an amended Bill in which all the clauses as to constant supply were, with one exception, struck out, also all the clauses relating to the quality of the water; and that the proposed amended Bill "constituted an entirely new measure in favour of the water companies." It will be nothing short of disgraceful if a Government with a powerful majority in Parliament should, after bringing in a Bill to give the metropolis certain much needed improvements in the matter of water-supply, allow a measure of an entirely opposite character, dictated by the companies themselves, to pass into law. That the companies should have the greatest objection to any control being exercised over their proceedings by anybody but the Board of Trade, with whom they have jogged along so amicably hitherto, is not unnatural from their point of view; and for that very reason the water consumers should insist upon the transfer of control to a body more prompt to protect their interests than the Board of Trade has been hitherto. Better a thousand times that the Bill should be lost for this session than that the Legislature should be induced to play the game of the companies.

THE GERMAN HOSPITAL, DALSTON.

LAST week her Imperial Highness the Crown Princess of Prussia, accompanied by the Countess Bernstorff, and attended by the ladies and gentlemen of her suite, honoured this hospital with a visit. She was received on her arrival by the Honorary Secretary and Dr. Hermann Weber, with other members of the committee and medical staff, and at once proceeded to make the tour of the hospital. Her Imperial Highness expressed herself greatly pleased with all the internal arrangements of the hospital, with the single exception of the bed-curtains with which some of the wards are furnished. These, the Princess thought, were articles which, for purely sanitary reasons, were better dispensed with in a hospital, and our opinion most completely coincides with that of her Royal Highness. The Princess passed through all the wards, making numerous inquiries about the various patients, and occasionally addressing to them some kind and considerate remarks. Her attention was particularly attracted by one unfortunate little patient, a baby four months old, whose father and mother had both died in the hospital a few months previously of phthisis.

The child itself was suffering from pleuro-pneumonia, and its clubbed finger-tips but too plainly showed how fully it had inherited its parents' diathesis. The child was sucking from a feeding-bottle, and the Princess at once remarked that she feared so sickly an infant could not be reared by such means, and, after consulting with the authorities on the matter, she generously ordered a wet-nurse to be procured for it at her own expense.

NOISELESS PAVEMENT.

THE fact that two companies, whose shares are already at a considerable premium, have lately been started for the supply of the bituminous paving asphalte, may we hope be regarded as an indication that London will soon have large additions made to the few patches of noiseless pavement which it already possesses. The boon which the latest of the metropolitan improvements is likely to confer upon members of our profession can only be estimated by the man who, boxed up in a brougham, spends his days in one continuous jolt, or by clinical professors, who daily experience the difficulty of demonstrating a murmur or a rhonchus while carts and cabs are thundering along the street outside. We would suggest to the parochial authorities who are intending to employ this kind of pavement, that they would be conferring an immense boon upon the sick poor by commencing their operations as close as possible to the hospitals. Nobody doubts the therapeutic value of peace and quietness, and yet in how few of our hospitals is this at present to be obtained.

Before this kind of pavement becomes general it will be necessary very largely to augment the means for cleansing and watering. At present, in dry windy weather, the detritus from the asphalte forms a most irritating dust, and in damp weather, when the pavement gets covered with the slimy mud for which London is famous, a state of things is engendered which is only equalled by the buttered slide of the pantomimes. Both these inconveniences may be removed by careful sweeping and washing. In ordinary dry weather, and in thoroughly wet weather, the pavement leaves nothing to be desired.

IRON SMALL-POX HOSPITALS.

THE increased accommodation provided by the Asylums Board for small-pox patients having led to the closing of the two iron hospitals in the St. Marylebone parish, Dr. Whitmore has taken the opportunity of drawing up a report of the cases of small-pox treated in those hospitals, together with a statement of the amount expended in the erection and furnishing of the new building, and the cost of the maintenance and medical treatment of the patients.

The old iron hospital was opened on the 11th of January, a second was completed on the 4th of February, inspected by the Sanitary Committee on the 6th of February, and on the following day occupied by convalescent patients, each hospital having ample space for thirty beds. The two hospitals continued open for the reception of patients until the 24th of June, on which day the last patient was discharged. Extending over a period of twenty-four weeks 219 patients were admitted, of whom 215 were suffering from small-pox and 4 from other diseases. These latter were immediately sent away.

The number of patients who died from the disease was 37, or 17·2 per cent. of all the cases under treatment, or about one in every six. Of the cases, 170 had been vaccinated, 4 had been inoculated, and 41 were altogether unprotected either by vaccination or a previous attack of small-pox. Amongst the fatal cases 20 are reported as having been vaccinated and 17 unvaccinated, from which it will appear that amongst those patients who had been vaccinated 11·7 per cent. died from the disease, and amongst those who had not been so protected 41·4 per cent. died.

In the place of permanent buildings, Dr. Whitmore suggests the construction of a considerable number of temporary iron hospitals, which can be put up, as has been proved, in less than a week, and which, immediately upon the outbreak, should be erected on appropriate sites round London. From week to week, or day to day, their number could be augmented as the epidemic increased, and as it declined they could be taken down and stowed away, to be kept in readiness for the next visitation.

The cost of maintenance of each person per week did not exceed 8*s.* 9*d.*; and if to the sum of £353 0*s.* 3½*d.*, for provisions, wine, spirits, &c., be added the further sum of £534 3*s.* 7½*d.*, which includes the salary of the medical attendant, the wages of the head nurse, the charge for medicines, the amount allowed to the pauper nurses and other assistants, together with every other expense incidental to management, the total cost per head does not exceed 22*s.* per week.

HOLIDAYS AND INFECTIOUS DISEASE.

THE *Pall Mall Gazette* is neither premature nor punctilious in sounding a note of caution to those courageous individuals who contemplate taking themselves or their children to the country or the seaside. In ordinary years it is a lamentably common occurrence for unsuspecting families to go abroad for health, and to contract infectious disease. And this year the risk must be greater than usual. No one should think of taking apartments without specific information as to the health of the previous occupants. It is only by requiring such particulars that a check can be put on the heartless and unprincipled lodging-house keepers of whom we have all heard, who would receive new lodgers into rooms and beds that had just been vacated by persons ill, in some cases dead, of scarlet fever. The public should remember, too, that persons, including hotel-keepers, incur the liability to a heavy fine, by Clause 39 of the Sanitary Act, who knowingly let any house or room in which has been any person labouring under any dangerous infectious disorder, without previously disinfecting such room to the satisfaction of a medical practitioner, as testified by certificate. Violators of this law should be mercilessly prosecuted. We would add one word of advice. The special peril of this year is that of catching small-pox. It has this advantage, that it can be completely guarded against by revaccination. Everybody going out of town, including children above eight or nine, should take the precaution of being revaccinated.

THE EMPEROR OF BRAZIL AT THE LONDON HOSPITAL.

HIS IMPERIAL MAJESTY paid a visit to this hospital on Friday, the 14th inst. His Majesty (whose coming was announced only a few minutes previously) arrived at the hospital soon after 9 A.M., and was received by Dr. Davies, Mr. Hutchinson, Dr. Letheby, the House-Governor, the Brazilian Consul, and the resident staff; and was joined shortly afterwards by E. H. Currie, Esq., the chairman of the House Committee. His Majesty passed through some of the accident and medical wards, the children's wards, and the wards for the diseases of women. He then entered the operating theatre, and showed considerable interest in the operating table, its mechanism being explained by Mr. Hutchinson. His Majesty next examined the small wards set apart for delirious patients and for cases desirable to be separated from the general patients; then the venereal ward, and, whilst in the latter, the arrangement of the fireproof staircases was explained to him. The Emperor then

passed through the garden to visit the newly-erected out-door wards for erysipelas and other infectious diseases. Next he was shown over the mortuary and post-mortem rooms, in which he manifested great interest; expressing an opinion that arrangements similar to those employed at Vienna ought to be in use at all hospitals, to ensure nobody being placed in a shell until some time after life is supposed to be extinct. His Majesty then briefly inspected the steam-washing machinery and gas-cooking apparatus. Whilst in the wards, the Emperor manifested the greatest interest in all that he saw, making numerous inquiries, and talking to such patients as could speak French or Spanish. His Majesty then walked across to the Medical College, where he was shown over the dissecting room, the lecture theatres, the chemical laboratory, and the museum; and, whilst in the latter, stopped to look at the bust of the late Dr. Pereira, whom his Majesty evidently knew by name. The Emperor's visit lasted over two hours; and, on leaving, he expressed himself as very pleased with both hospital and college, especially observing the cleanliness and order of the former.

SCARLATINA IN INDIA.

IT appears that something more than scepticism exists regarding a statement we made some time ago as to the occurrence of cases of scarlatina in India. Our contemporary the *Indian Medical Gazette* ventures to think that we have fallen into error in this matter, and asks for further evidence on the subject. Considering the commercial and other relations of India with different countries, it is certainly somewhat curious that cases of scarlatina should be of such rarity that their occurrence even is denied. It may be and probably is the case that the Indian climate is very inimical to the spread of that disease. Its occasional introduction through passengers making the journey to India overland was what might have been expected; and we endeavoured to account for its alleged occurrence of late on the hypothesis that the more rapid transport of troops by the Government overland route system of steamers had much facilitated the introduction of the scarlatina poison. We were furnished with some details by more than one observer in India which appeared to us to establish the presence of scarlatina in that country; but what is more to the purpose, we have by the last mail received a communication from Surgeon Chapple, Royal Artillery, in which he describes an outbreak of genuine scarlatina at Kirkee, a large artillery station within six hours by rail of the presidency town, Bombay. The disease was introduced by a draft of artillery in February last, which arrived from England on board the *Euphrates* troop-ship. We hope very shortly to publish Surgeon Chapple's interesting paper, to which we must refer our Indian readers for further details.

SANITARY STATE OF LEEDS.

AN admirable and exhaustive report has just been made by Mr. J. Netten Radcliffe on the sanitary state of Leeds, with particular reference to diarrhœa and fever. We shall have occasion to recur to this report on a future occasion, but we lose no time in giving our readers the benefit of the conclusions at which Mr. Radcliffe has arrived. He finds that, notwithstanding the expenditure of a million of money on sanitary works and the establishment of a regularly organised health department, the mortality from preventable diseases, particularly diarrhœa and fever, is still excessive. The causes which give rise to this excessive mortality are: 1st, an indefensible method of excrement disposal; 2nd, a faulty regulation of the sewers, which are neither properly flushed nor ventilated; 3rd, an insufficient and badly adapted supply of water; 4th, badly constructed houses and cellar dwellings; 5th, very imperfect scavenging arrangements. He recommends, first, a thorough investigation into the state of the sewers, the construction of proper flushing apparatus, and a general system of sewer ventilation. He advises a thorough examination of the water, and that until the wants of the town have been amply provided for, none should be sold to neighbouring districts; also the opening out of blind courts, the destruction of numerous dwellings unfit for human residence, and that the law as to overcrowding should be put in force.

SCURVY.

IT is satisfactory to know that the law is sometimes put into motion successfully for the purpose of punishing those who carelessly or wilfully violate such of its provisions as refer to the maintenance of health at sea. An official inquiry was recently held at Hartlepool, by the medical inspector of the Board of Trade, relative to an outbreak of scurvy that occurred on board the barque *Lebanon*, on her passage from Pensacola to England. The evidence collected by the inspector went to prove that the lime- or lemon-juice put on board for the use of the crew was altogether insufficient for the voyage, that it was given out irregularly, and that the vessel arrived home with several cases of scurvy. The facts appeared so positive that the Board of Trade ordered a prosecution, and a summons was taken out against the owners of the vessel, under a clause of the Merchant Shipping Act, 1867. The offence was fully proved, and the defendants fined accordingly, the defence being that the owners had given orders to their provision merchants to furnish a proper supply of juice, but, as it appeared, had failed to see that those orders were correctly carried out.

Prosecutions of this kind are useful in the way of causing care to be exercised in the inspection of stores; but as the Board of Trade has already done good service in ensuring to the sailor antiscorbutics of proper quality, it might proceed a step further, and see that a sufficient quantity is supplied for the voyage specified in the ship's articles. Such a provision would probably have prevented this outbreak of scurvy.

CERTIFYING DUTIES OF PUBLIC VACCINATORS.

DR. BRECKNELL, a public vaccinator, has been summoned before the magistrates of Gateshead for not transmitting a certificate of successful vaccination in the case of the child of Mr. Dixon Smith. His defence was that the child was not brought back to be inspected the day week after vaccination. The reply to this was that the child had been by consent of the doctor examined at a neighbour's house, and was reported to be all right. Dr. Brecknell admitted this, and said he had instructed them to bring the child to the vaccination station when it was quite well. The Clerk to the magistrates maintained that the doctor, having "ascertained" the success of the operation, should have forwarded the certificate. Dr. Brecknell admitted that he had charged for the case, having seen it and certified since. One of the magistrates thought the defendant literally right in his defence. Nevertheless, he was adjudged to pay the costs. He expressed his determination to appeal.

We regret that we cannot quite justify Dr. Brecknell in this case. He fully satisfied the spirit if not the letter of the Act in ascertaining the success of the vaccination, and should have transmitted the certificate, as he finally did. It should be the part of public vaccinators to do everything to smooth the working of this difficult Act, and not to multiply difficulties.

THE CONJOINT EXAMINATION SCHEME.

AT the time we write there is little more to report of this scheme than we stated last week. A meeting of the committees representing the respective Colleges was held on Friday of last week, when, we believe, it was agreed to submit the whole scheme to the College of Physicians and to the Council of the College of Surgeons, at meetings to be called early next week. Little more to complete the scheme—so far as completeness can be predicated of such an imperfect plan—remains to be done than to come to an agreement in regard to the apportionment of fees to the respective Colleges principally concerned. In any scheme the great difficulty will be the due support of the museum and library of the College of Surgeons.

THE VALUE OF PRIVY COUNCIL MEDICAL REPORTS.

A GOOD example of the influence which may be exerted by an intelligent Central Department of Health has just occurred at Oldbury. In consequence of a visit of Dr. Thorne, a letter was addressed by Mr. Simon to the Oldbury Board of Health, recommending the paving of the roads, the sewering of the streets, the reorganisation of the system of refuse removal, and the appointment of a medical officer of health. Upon the receipt of this communication the Oldbury authorities have resolved to commence the paving; they ask advice as to the best method of disposing of the sewage, that being the cause of delay in constructing the sewers; they have adopted a system of periodical removal of night-soil; and a medical officer of health will be at once appointed. It can scarcely be doubted that these improvements will raise the standard of health and comfort amongst the inhabitants of Oldbury, and will tend to increase the productive capacity of the industrial population and diminish pauperism.

MORE RED TAPE.

IN reply to Mr. Heygate, Mr. Stansfeld said that it was the practice in sparsely populated unions to admit of separate vaccination contracts for the months of April and October only. An application had recently been made to the Poor-law Board to sanction such an alteration of the vaccination contract as would enable vaccination to be performed in the month of July; but the Privy Council had advised them not to assent to the arrangement. In the first place, April and October are by no means the most convenient months for parents to carry their children long distances to the public station, as they must do in sparsely populated districts; and one would have thought the fine long days of July, between hay and corn harvest, far preferable. Moreover, why should not the guardians be allowed to consult the convenience of their labourers? But how if small-pox should extend to this district, as it may do any day? Is it to have full fling because the Privy Council have a crotchet? We hope Mr. Heygate will persist in his efforts to break down a system which leaves absolutely no discretion with the local authorities.

POOR-LAW MEDICAL RELIEF IN SCOTLAND.

THE Committee on the Scotch Poor Law report that the present condition of medical relief is not generally satisfactory. The parochial boards are not obliged to appoint medical officers, and if they are appointed their tenure of office is uncertain, and their emoluments are not always such as to secure competent men. In England and Ireland the public exchequer contributes one-half the actual amount expended in salaries to medical officers and in medicines; whereas in Scotland a fixed sum of only £10,000 is granted from the public funds, which does not meet one-third of the very limited expenditure which occurs under this head in Scotland. The Committee recommend that Scotland should be placed on the same footing as England and Ireland; that local boards should be compelled to appoint medical officers, with a suitable salary, which should be exclusive of the cost of medicines; and that the dismissal of medical officers should be subject to the approval of the Central Board of Supervision.

SMALL-POX IN THE NAVY.

A CASE of small-pox was landed on the 16th ultimo, at Portland, from H.M.S. *Seamew*, and was taken to the Government Hospital at the breakwater. If seamen from the Royal Navy enter this hospital under these circumstances it is unjust to the captains of merchant vessels not to grant them a like privilege. But, as we have had frequent occasion to remark, seamen, when landed from coasting or other trading vessels with small-pox upon them, are knocked about from pillar to post or left in a boat for hours, and often sent on board again.

Small-pox continues to be imported into Shields by the shipping. A barque arrived on the 14th ult. with a case on board. We also continue to export the disease to Halifax as well as other British possessions.

THE MEDICAL CLUB.

A REFERENCE to our advertising columns will inform our readers that the Committee of the Medical Club have declined to take the proposed new premises in Pall Mall, believing that, for several weighty reasons, they are inferior to the house in Spring-gardens. Instead, therefore, of removing, it has been resolved to enlarge and improve the public rooms in the present building, and to remain there until a decidedly superior and permanent house can be obtained for the Club.

We understand that the recent and final reorganisation of the terms has placed the Club upon a much better footing than it has ever held as yet; and we cannot but hope, with Dr. Lush, that those members who have seceded in consequence of the change will, now that that change has proved not only necessary but successful also, reconsider the matter, and rejoin the Club.

ROYAL MEDICAL BENEVOLENT COLLEGE.

AT a recent meeting of the Council of this institution, the head master, the Rev. Dr. West, expressed an opinion in favour of the desirableness of introducing lay boys, and regretted that up to the present time no efforts had been made in this direction in consequence of the want of separate masters' residences, for the erection of which, he was told, the Council had no funds. Hearing this, Mr. Erasmus Wilson most generously offered to erect, at his own expense, a suitable residence, the cost of which it is calculated will be at least £3000.

TOWN AND COUNTRY.

IF there were any truth in the old saying that "God made the country, and man made the towns," it would follow from what the Census reveals that the human is rapidly encroaching on the divine dominion. For it appears that of the 22,704,108 of population now existing in this country, 12,900,000 are located in the principal urban districts, and 9,803,108 in the smaller towns and country parishes. Since 1861 the urban population has increased 18 per cent., while the rural increase has been 7 per cent.; so that the towns are growing more than twice as fast as the country in populousness.

THE SEQUELÆ OF SMALL-POX.

MUCH is said by the blatant enemies of vaccination against the sequelæ of vaccination, in utter ignorance doubtless of the alternative sequelæ of small-pox. Physicians well know the serious character of the sequelæ of small-pox—the tendency to tubercular disease, to carbuncles, ulcers and boils, the occasional blindness, &c., which it is apt to leave. We are of opinion that this subject should be more fully illustrated than it has yet been. We have heard enough of death from small-pox; but this is only a portion of the account against that horrible disease. We should be glad to receive short abstracts of cases illustrating its secondary consequences.

Dr. Whitmore, in an account of the cases treated in the two iron small-pox hospitals of St. Marylebone, gives some information of the kind we desiderate. He says: "As sequelæ to the severe forms of the disease, diarrhœa occurred in 10 cases, phlegmon in 5, erysipelas in 1, ulceration in 4, sloughing of the cuticle in 2, hæmoptysis in 5, bronchitis in 4, and pneumonia in 1."

THE COLLEGE OF PHYSICIANS.

A QUANTITY of Condurango Root from Ecuador has, we understand, been sent to the College of Physicians from the Colonial Office, with a view to testing its asserted merits as a remedy for cancer. Some of the root has been sent to Professor Humphry and to St. Bartholomew's and the Middlesex Hospitals for therapeutic purposes. A committee of medical men appointed in America to investigate the properties of the remedy have reported that the drug is quite inert as a remedy for cancer. Nor have chemists as yet been able to detect any special principle in the bark or root.

ST. MARY'S HOSPITAL.

WE stated a few weeks ago that, in consequence of the liberal conduct of the governors of St. Mary's Hospital, who have relinquished the share of students' fees formerly paid to the charity, the staff of lecturers had been enabled to make important improvements in the medical school; and amongst them the appointment of a medical tutor. We understand that, in addition to this, three scholarships have been established, each of the annual value of £40, and tenable for three years, to be awarded by open competitive examination in natural science previous to entrance at the school. The first of these, and an annual exhibition of £20, will be filled up in September next.

THE CHOLERA OUTBREAK AT SECUNDERABAD.

ACCORDING to the latest intelligence, it would appear that, in the outbreak of cholera that originated at Secunderabad in the 18th Hussars, there were no less than eighty-five admissions into hospital, with thirty-nine deaths from that disease, from May 25th to June 4th last. The regiment removed on June 2nd to a place named Kaisera, a few miles distant from the previous camping ground, and we are glad to learn that on June 6th there were no fresh cases, and that those remaining in hospital, both in the camp and at Secunderabad, were either progressing favourably or were convalescent.

THE YARMOUTH NAVAL HOSPITAL.

As we announced last week, the Lords of the Admiralty have been pleased to extend for three years the period of five years during which Dr. William Macleod has served as Deputy Inspector of Hospitals in charge of the Naval Lunatic Asylum at Yarmouth. This is an expression of the satisfaction felt by the Admiralty at the way in which the duties of the office have been performed, and must be very gratifying to Dr. Macleod, whose valuable contributions to the naval blue-books on subjects connected with questions of lunacy we have noticed on several occasions.

EFFICACY OF VACCINATION IN INDIA.

DR. SHORTT, the Superintendent-General of Vaccination in the Madras Presidency, in a paper republished in the *Madras Journal of Medical Science*, states that the Indian vaccine lymph is as efficacious as any to be found elsewhere, provided that the operation be carried on from arm to arm; and that so far from climate interfering with the success of vaccination, it is quite the contrary. He says that lymph preserved either in capillary tubes or on glass plates deteriorates to a certain extent in most cases, as evidenced by the more rapid course of the vesicles, and the occurrence of excessive local irritation. Dr. Shortt believes that vaccination is fully capable of stamping out small-pox in India if it had fair play.

MR. RAWLINSON ON THE SEWERS OF LIVERPOOL.

MR. RAWLINSON, C.B., has addressed a letter to the Liverpool *Daily Post* characterising the report of Drs. Parkes and Sanderson as "inconclusive, misleading, and dangerous to the health of Liverpool." The conclusion that a general system of sewer ventilation is not required in Liverpool is a grievous mistake; worse than a crime—a blunder. He says the most perfect system of sewers requires *a general system of ventilation*, and that the sooner Liverpool uncovers and ventilates every covered sewer-shaft, and makes new where required, the better will it be for the health of the inhabitants.

PROFESSOR SAYRE caused much merriment the other day in the theatre of University College by his comparison of a fistula leading down to dead bone to part of the anatomy of a hen. Our readers, by referring to page 341 of Johnson's translation of Ambrose Paré's work on Surgery, will find that the surgeons of Paré's time had also drawn the same comparison. We regret that the expressions used by Paré are not such as we can reprint in the present day.

WE are glad to observe that the Dudley Guardians are at length in earnest about vaccination. They have adopted the report of the Vaccination Committee, recommending that a number of persons who positively refused to have their children vaccinated should be summoned forthwith.

ON Tuesday, at a meeting of the lecturers at Surgeons' Hall, Edinburgh, it was resolved by a majority to rescind the resolution adopted last year permitting lectures "to female as well as to male students." The lecturers are now, therefore, prohibited from giving instruction to female students.

WE understand that Dr. Headland, who is now the senior physician to the Charing-cross Hospital, has resigned the lectureship of Materia Medica, and that this chair will be filled by Dr. Douglas Powell, the senior assistant-physician.

WE regret that the Government have been compelled to withdraw the Pharmacy Bill; let us hope with a view of bringing in a more satisfactory and complete measure.

THE Treasurer of St. Thomas's Hospital has secured by his dinner nearly £11,000 out of the £20,000 he requires to furnish the institution.

THE REPORT OF THE CONTAGIOUS DISEASES COMMISSION.

THE Commission appointed to inquire into the operation of the Contagious Diseases Acts have presented their report. It commences with a short review of the progress of the legislation in question, leading up to the conclusion that the Act of 1866 was passed before a sufficient time had been given to the Act of 1864, and showing a marked distinction in principle between the Act of 1864, on the one hand, and those of 1866 and 1869, on the other. The Act of 1864, it is stated, dealt only with the disease. No proceedings were taken unless there was evidence to satisfy a magistrate, upon the information of a superior officer of police, that the woman was a fit subject for medical examination; and no woman could be detained in a certified hospital except by a magistrate's order, founded on the certificate of the medical officer that she had a contagious disease. The Act of 1864 provided, though not completely, for the separation from the community of women in a condition to spread contagious disease. But the Act of 1866 went further. It not only recognised prostitutes as agents in the propagation of the disease, but sought so far to control their conduct as to render the practice of prostitution, if not absolutely innocuous, at least much less dangerous. The hospital and police arrangements were, it seems, complete at the commencement of 1870; and the public women in all the protected districts were thence required to appear, and the examinations, which had previously taken place at periods varying from three months to three weeks, were enforced upon every prostitute once a fortnight. These proceedings had a considerable effect upon the public mind. An active and influential organisation was arrayed against the Act. Public meetings were held in most of the subjected districts and in several large towns, at many of which meetings inflammatory statements were made as to the character and operation of the new law. Most of those statements, so far as they had any foundation whatever, were perversions of the truth; but they had their effect.

The carrying out of the Acts is entrusted in England to the metropolitan police, in Ireland to the local constabulary; and the tests of prostitution relied upon by them are, it appears, as follows: residence in a brothel, solicitation in the streets, frequenting places where prostitutes resort, being informed against by soldiers and sailors, and, lastly, the admission of the woman herself. The police act not on one, but on several concurrent proofs. Among the means adopted by some of the opponents of the Acts to bring them into public odium have been charges of misconduct or gross negligence on the part of the police in putting the law in force against common prostitutes. Cases have been brought forward in publications, and by speakers at public meetings, not only of cruel insults offered to innocent women through the agency of the Acts, but of repeated wrongs to the unhappy women subjected to them.

The Commission are satisfied that the police are not chargeable with any abuse of their authority, and that they have hitherto discharged a novel and difficult duty with moderation and caution.

The Commission have taken a large amount of evidence on the subject of venereal disease. The evidence is on some points conflicting, but they are assured on the highest authority that the disease is one of a most formidable character; and it was in accordance with the report of the Medical Committee that the measure of 1866, providing for the compulsory medical examination of prostitutes, was adopted by Parliament. The medical witnesses experienced in the administration of these Acts are nearly all agreed that the medical examination of the public women is essential to the system.

The medical evidence which was submitted on the part of the opponents of the Acts dwelt chiefly on the admitted difficulty of distinguishing the contagious from the non-contagious discharges to which females, and especially prostitutes, are liable. No new facts were adduced in this evidence, nor did it satisfy the medical members of the Commission either that there is any better, or indeed any other method of detecting venereal disease in the female than that described by Mr. Sloggett as in use under the Acts, or that this method is not perfectly effectual in the great majority of cases.

From an examination of the statistics put in by the Army and Navy Medical Departments, and by the police, the following conclusions are drawn: that little or no impression has been made upon gonorrhœa, and that there is no distinct evidence that any diminution of disease among the men of the army and navy which may have taken place is attributable to a diminution of disease contingent upon the system of periodical examination among the women with whom they have consorted. Notwithstanding the necessarily inconclusive nature of the statistics, it is, however, observed that, so far as the army and navy are concerned, the evidence appeared to testify to a general impression on the part of the medical officers of both services that the Acts have operated beneficially on the health of the men.

And, as a general conclusion, it is observed, that had the physical aspect of the question alone been referred to the consideration of the Commission, they would have felt it their duty to recommend, either that the partial enactment should be made general or at least that it should be extended to the large towns; but the moral and political bearing of the Acts, into which they were required to pursue their inquiry, presented more doubt and difficulty. With regard to this part of the inquiry, the Commission are satisfied that a simple diminution in the number of women engaged in this traffic has been attained in the districts subjected to the Acts, that the absence of public solicitation is a material gain to public decency and morality, and that the conduct of the women in the streets has sensibly improved. Although it is true that this ameliorated state of things is attributable in some degree to causes independent of the Acts, they have both directly and indirectly promoted the objects of sanitary and municipal police. Great reclamatory results are also claimed for the Acts, and highly deterrent effects, especially on the very young girls, are ascribed to them. If such results have been obtained, either wholly or partially, through the operation of the Acts, those who demand their absolute repeal are bound to show that they have produced evils to counterbalance the good which, after all reasonable deductions have been made, may be fairly attributed to them.

Besides the main justification of the Acts, that physical ability is not less essential than discipline itself to the efficiency of the services, they are defended on the ground that camps, garrisons, and seaports are especially the resorts of the prostitute class, and that the restraints imposed by the conditions of the naval and military services lead to consequences which, if they cannot be averted, may at least allow of mitigation. Such reasons are sufficient to justify exceptional legislation. Stringent police regulations may properly be applied to places where disorderly persons assemble; and though the provisions of the Acts of 1866 and 1869, in their exclusive application to military and naval stations, may not be justifiable, special regulations for the treatment and control of a class of persons frequenting certain districts under conditions calculated to engender and propagate disease, are alike just and expedient. A careful examination of the objections alleged against the Acts leads to the conclusion that, although the periodical examination of common prostitutes is the most effectual mode of dealing with the disease, it would be difficult, if not impossible, to make the system general. A modification of the Acts, capable of general extension throughout the country, should, therefore, be adopted in lieu of the present system.

The proceedings under the Act of 1864 which dealt directly with the disease are taken as the basis of the new system, and provision is to be made for their extension to any town in the United Kingdom that requests such extension and provides proper hospital accommodation; further, it is suggested that certain districts in London particularly resorted to by low and frightfully diseased prostitutes shall be brought within the provisions of this Act.

The attempt to present the reader with the main argument of the report has occupied so much of our space that

we are reluctantly compelled to refrain from following the recommendations in detail, and must be content to produce them as they appear in the final summary:—

1. That the periodical examination of the public women be discontinued.

2. That every common prostitute found to be diseased after an examination by a medical officer upon a voluntary submission, or upon a magistrate's order, shall be detained in a certified hospital until she is discharged by a magistrate's order, or by the authorities of such hospital; provided that such detention shall in no case exceed the period of three months.

3. That in order to obtain a conviction under 29 Vict., c. 35, s. 36 (the Act of 1866), it shall not be necessary to prove that the owner or occupier of the house therein named had reasonable cause to believe that the prostitute was affected with a contagious disease.

4. That 32 and 33 Vict., c. 96 (the Act of 1869), ss. 3, 4, and 5, be repealed.

5. That the Secretary of State for the Home Department be substituted for the Commissioners of the Admiralty and the Secretary of State for the War Department in the Act of 1866, and that the police employed in carrying the Acts into force perform their duty in uniform.

6. That the provisions contained in Sections 11 to 21 inclusive of the repealed Act of 1864 (with an amendment of section 18, corresponding to the amendment proposed in section 36 of the Act of 1866), be extended to any place in the United Kingdom (except the cities of London and Westminster), from which a request for such extension shall be made, and in which proper hospital accommodation shall be provided.

7. That every keeper of a public-house harbouring prostitutes be deprived of his licence.

8. That every keeper of a common lodging-house harbouring prostitutes be subject to the penal clauses of the Common Lodging-Houses Acts.

9. That the certificate of Secretary of State under the 19 and 20 Vict., c. 69, s. 16 (the Police Counties and Boroughs Act), do certify that the third section of the Vagrant Act, 5 Geo. 4, c. 83, and the section of the Towns Police Clauses Act, 10 and 11 Vict., c. 89, relating to common prostitutes and night-walkers, have been duly observed.

10. That 24 and 25 Vict., c. 100 (the Act to consolidate and amend the statute law relating to offences against the person), ss. 51 and 52, be amended by extending the age from twelve to fourteen years.

11. That girls under the age of sixteen acting as common prostitutes be sent to a home or industrial school for a period not exceeding two years, if they cannot be otherwise provided for to the satisfaction of a magistrate.

12. That the Acts be partially extended to the metropolis.

THE REPORT OF DRS. PARKES AND SANDERSON ON THE SANITARY STATE OF LIVERPOOL.

THE second subject specially referred to by Drs. Parkes and Sanderson was the condition of the sewers. It was affirmed by Mr. Alderman Bennett, on evidence that could scarcely be gainsaid, that many of the sewers were little better than underground cesspools, and the chief complaints of THE LANCET report were: that, the sewers being practically inaccessible, there was no sufficient guarantee that foul deposits did not accumulate; whilst the total absence of flushing apparatus rendered it probable that deposits existed in the lower parts of the town. Now it appears to us that the corporation made a great mistake in referring this, which is an engineering question, to two physicians, who could not be supposed to possess any special knowledge of the best construction and arrangement of sewerage works. It is not surprising, therefore, to find that Drs. Parkes and Sanderson have not gone very deeply into the condition of the sewers on their own account, but that, having satisfied themselves by the examination of two sewers that there was just cause for further inquiry, they recommend "that a complete and exhaustive inquiry should be made by the officers of the corporation as to the existence of deposits in the sewers." And as to the cause of such deposits, they simply quote the opinion of the borough engineer that they depend on defective construction, defective inclination, or insufficient water-supply, and they further recommend that works necessary for the remedy of these defects should be immediately commenced. But before undertaking the construction of new sewers with steeper gradients, and providing a fresh supply of water, which can only be done at an enormous expenditure, we venture to ask the corporation to take the opinions of other engineers. We have it upon the highest engineering authority, that the cleanliness of sewers depends chiefly upon their form, and on the provision of proper means for inspecting them and flushing out the first beginnings of deposit. At Bedford there is a sewer nearly two miles long which is practically a dead level. In West Ham the sewers are all below the level of high water, and there is a fall of only three feet in the mile, and yet in neither case has an ounce of deposit ever been removed by hand, nor a gallon of fresh water used for flushing purposes. There is already an abundant supply of water in Liverpool, and we doubt if there be a single sewer which might not easily be kept clear of all deposit. Two things are wanting, neither of which is found in Liverpool—namely, facility of inspection, so that the first beginnings of deposits may be seen; and secondly, proper flushing-bars, that the deposits may be at once removed.

On the question of sewer ventilation, the Commissioners report as follows:—"In those cases in which the foul condition of the sewers appears to be unavoidable—*e.g.*, in those sewers which are affected by the tide—we recommend ventilation. We do not recommend the adoption of any general system of ventilation, entirely agreeing with your borough engineer in his opinion that for well-constructed sewers of good inclination, with sufficient water, it is unnecessary." Now, we confess to profound astonishment at this result. Surely the case of Croydon ought never to be lost sight of. The town was sewered with pipe-drains in which accumulations to any extent were impossible, and yet whilst they remained unventilated the public suffered from the escape of sewer gases. The high mortality from fever was at once reduced by adequate sewer ventilation. So convinced are the authorities at the Home Office of the importance of sewer ventilation that it has been made a proviso, in a recent application for authority to borrow money for sewerage works, that every sewer shall be adequately ventilated. Instructions have been given that the provision for ventilating sewers shall not consist merely of a few openings by which the surplus gases generated in the sewer may escape with safety into the atmosphere, but of very numerous openings of considerable size, by which, some acting as downcast and some as upcast shafts, a thorough system of ventilation may be established. Thus the gases formed would be largely diluted before they left the sewers, and would practically become innocuous when further diluted in the open air. Nor is this sort of ventilation restricted to foul and badly-constructed sewers. The Government authorities say, "The rapid fall of sewers will no doubt carry off the sewage very quickly to the outfalls; but with a fluctuating volume of sewage passing along them, the sides of the sewer above a certain level are alternately wetted by foul water and exposed, and from this surface the foulest gases are probably given off." And in towns like Liverpool the danger is increased by the steepness of the gradients, the amount of surface which is alternately wet and dry being increased thereby. It is, therefore, impossible to have sewers without the production of sewer gases; and although there are miles of well-constructed sewers in Liverpool which have no deposit whatever, the Commissioners afford us no positive evidence that the air of such sewers is harmless, but, on the contrary, they forbid the termination of the drains within the houses because of the danger which would certainly arise.

Four other points were specially referred to them. First, the closure of the outlets and the influence of the tide. We agree with the Commissioners that outlets exposed to the force of the wind are very dangerous, and that no harm comes of their being below high water. The Commissioners have made experiments on the effect of the tide upon the sewers, and find that it exerts no appreciable influence.

We shall look for the evidence upon which this opinion is founded with considerable interest. It is opposed to general experience. At an inquiry held at Sunderland a few weeks ago, it was amply proved that the inhabitants of the upper portion of the town could readily tell the state of the tide by the stench evolved from the defective drains. When the tide was rising the smell was intolerable; when the tide was receding the air was pure. It was proved by builders and householders that the traps were also rendered useless by the tide, and as the sewers of Liverpool are very like those of Sunderland, we should expect the same result. But it appears to us that there is already evidence that the same action takes place. The President of the Liverpool Architectural Society says that the volatile gases which lurk in the close sewer chambers under ground are ever ready to spread disease at the bidding of the winds, *the tides*, and the overheated atmosphere. Anyone going, says he, to the brow of Everton hill, or sauntering around the Audley-street Waterworks, when the temperature happens to be a little higher than usual, will, if he have any sense of smell, experience most unmistakable traces of these sewer gases and exhalations in the air he breathes. Even Drs. Parkes and Sanderson do not seem to be sure upon the point, and so they wisely recommend the ventilation of those sewers which are affected by the tide, by means of spacious and lofty shafts.

As regards the discharge of warm waste water into the sewers, the Commissioners are of opinion that the benefits of a large volume of warm water in cleansing and ventilating the sewers will be outbalanced by the danger arising from the accelerated decomposition of the sewage. They also object that, in consequence of the saturated condition of the air and the high temperature, no warm sewer can be entered unless it be opened to the air for some time previously; consequently no such sewer can be inspected without the expenditure of much time and labour in the preliminary preparations. We scarcely infer from this that the Commissioners denounce categorically the practice of allowing warm water to pass into the sewers. The proposal would have been too Quixotic. There is no large town in England where thousands of gallons of warm water are not turned into the sewers daily, and without the smallest evidence of any danger whatever to the public health. If the sewers are properly ventilated, the warmth promotes the movement of the air. Indeed, if we prohibit the discharge of warm waste water into the sewers, it would be necessary to recur to the old system of open gutters. The manufacturers cannot get rid of the waste water in any other way.

With respect to steam, it is another matter, because steam can either be condensed or discharged into the air without serious difficulty or objection; and although it is not by any means proved that there is danger in discharging it into the sewers, we think that the Commissioners are right in trying to keep it out.

The Commissioners report that the Archimedean screw ventilators actually remove a large quantity of air from the sewers; but we propose to recur to the subject when we shall have received the details of the report.

In conclusion, we have only to repeat that the question of adequate sewer ventilation lies at the foundation of any possible improvement of the public health in Liverpool. There is nothing in the report of Drs. Parkes and Sanderson to shake this opinion, but, on the contrary, much to confirm it. It is impossible not to perceive that the Commissioners have agreed with Mr. Newlands on all disputed points, and we regret exceedingly that they should have endorsed principles which, as we believe, are dangerous to the public health.

THE EDUCATION OF THE BLIND.

THE International Exhibition, which now for nearly three months past has attracted numbers of visitors to South Kensington, contains at least one collection of objects which will have especial interest for members of the medical profession, and which, as well from its position in an upper chamber of the Albert Hall, as from the more immediately striking character of more accessible exhibits, might very easily excite less than the attention it deserves. We refer to the appliances for the elementary or industrial education of the blind, and to the collection of articles of various kinds made by blind persons. The contrivances by which it is possible to supply, either wholly or in part, the want of guidance from vision, are matters that much concern the physiologist; and the possibility of elevating the blind into the position of useful and independent workers is full of interest for all who desire the welfare of their species. On both grounds, therefore, the department of the Exhibition to which we refer will commend itself to members of the medical profession, who also, in the great majority of instances, will have it in their power to be the first to call the attention of the blind and of their friends to the advances that have of late years been made in this branch of education.

For these advantages themselves, and still more for the prospect of rendering them practically available, the public is in very large measure indebted to Dr. Armitage. This gentleman, whose failing sight compelled him to abandon practice several years ago, has since devoted himself with untiring benevolence to the task of alleviating the privation of his fellow sufferers. As one of his most effectual steps to this end, he may be said to have laid the foundation of a literature for the blind. The raised characters by which reading by touch is rendered possible have hitherto been shaped upon several distinct systems, Moon's, Lucas's, Frere's, and others, each of which has been taught and used, generally to the exclusion of others, in certain institutions; so that the scanty supply of raised books actually printed has been still further diminished by these being expressed in alphabets each of which is undecipherable by the touch until it has been laboriously studied. Many of these raised alphabets present great difficulties to the finger; and we believe Dr. Armitage was the first to point out that they have actually, in many cases, been fixed upon for the use of the blind, by the sighted, solely on account of their ready legibility to the eye. Lately, however, a committee has been formed, consisting of gentlemen who are so far blind as to be unable to read except by touch, and this committee has undertaken a very laborious investigation, both by experiments of their own, and by collecting the testimony of other blind readers, in order to determine what form of raised character would be the best for general adoption, so as to do away with that tactile Babel under which the blind have hitherto groaned. They have at length decided to recommend a character invented by M. Braille, a French gentleman, which is entirely unlike any of the forms of type that are known to the sighted. The Braille letters are all made from a root form consisting of six dots, arranged in two upright parallel rows of three each. Every letter is indicated by the omission of one or more dots from the six; and as the proper place of each dot is known, and the number of possible combinations is very considerable, the learner has no difficulty in recognising each symbol by feel, and the inventor has had none in finding symbols enough for his purpose. The Braille character is found to lend itself with equal facility to ordinary writing, to shorthand, and to music.

Another service for which the blind are indebted to Dr. Armitage is for making known in this country the wide field for occupation as tuners and teachers of music that has been opened out to them by the experience of France and of America. In both these countries the first care of the managers of educational institutions for the blind is thoroughly to test the musical capabilities of the pupils, and then to train those of sufficient natural gifts and promise to become really proficient, so that they are qualified to engage in music as a profession. It is felt that blind teachers labour under natural disadvantages for which some compensation is required, and this is sought simply in taking care that they are thoroughly prepared for their work in life, and that no sentiment of compassion for an individual shall ever occasion a school certificate of efficiency to be given to anyone who is not thoroughly efficient. Instead of learning, as in England, some wretched handicraft by which they can barely preserve themselves from want, and, in addition to this, a smattering of music as a

recreation, the blind in America furnish the best musical teachers, as in France they furnish the best and most successful tuners. In both countries they earn what may be considered handsome incomes, and are enabled to become independent and self-respecting members of society; while only those who have no musical faculty are left to engage in brush-making and similar trades. On all these points, and on many others connected with the subject, much interesting information may be obtained from a little work which Dr. Armitage has lately published,* and to which we must refer those who are anxious for further particulars.

One important point, however, may still be noted. By the aid of a writing frame, which it has required much ingenuity and patience to render perfect in all its details, the blind can themselves impress the Braille character upon paper with perfect accuracy, and so use it as a means of holding written communication with each other, or with any sighted correspondents who will overcome the slight difficulty of learning to decipher it. The written character thus made is undistinguishable from that which is printed; and the convenience of the two being thus identical is very great. The dots are made by pressing upon the paper by a blunt awl, guided by certain holes in the frame; and the hollows thus made are felt as prominences on the other side of the paper. Nor is the method confined to paper only. Perhaps its greatest advantage is that it permits the multiplication of plates from which books in raised character may be printed, since this process is brought within the reach of any blind person to accomplish for himself. Instead of paper, a sheet of very thin brass is placed in the writing frame, and is indented by the awl in the ordinary way. The finished metallic sheet is backed up by a composition consisting of Portland cement and glue, and it then forms a stereotype plate, from which paper facsimiles of itself may be printed by simple pressure. Every intelligent blind person may in this way prepare plates which will increase the supply of literature available for all who are in like manner afflicted; and the process can hardly fail to be adopted by the blind as the favourite occupation of their leisure. The materials are cheap; the labour is extremely easy; it admits of being taken up and laid down at any time; and it is perfectly cleanly, so that it may be done by a lady in a drawing-room. There can be no doubt, we think, that by its means the store both of books and of music available for the blind will soon be largely augmented.

In the department of the Exhibition to which we have referred there will be found many examples of writing and printing by Braille's method, as well as by those which the Braille seems likely to supersede. There will be found also some excellent specimens of industrial work in both the heavier and the lighter articles of blind manufacture.

REPORT ON VACCINO-SYPHILIS.

THE following are the cases (of the first series reported on April 25th) which the Committee have had an opportunity of seeing through the courtesy of Mr. Hutchinson:—

Vaccinifer No. 1, female, aged seven months. Had been used on February 7th for vaccinating the series of cases reported by Mr. Hutchinson on April 25th. This child is hydrocephalic; its head is much elongated and widened posteriorly; the fontanelle is somewhat more open than usual. It is pallid, but not unhealthy-looking. There are five marks on the left arm from vaccination, which are quite healed. No eruption can be seen anywhere; the arms and genitals are quite clear, but the mother states that there were sores on the latter after vaccination. The glands in both groins can be distinctly felt. The mother is rather pale, but looks healthy, and declares she has always been so. This is her first child.

The following persons were vaccinated from the preceding case on February 7th, and presented on May 16th the following features.

1. Female, aged seventeen, a hearty, robust, plump girl, with bright colour. Has three vaccination marks on the left arm in a horizontal line, the outer of which is not yet healed. The base of this sore is very slightly thickened. Mr. Hutchinson states that this girl has been living at home with her friends, and taking her medicine very irregularly.

2. Male, aged eighteen, assistant to a stationer in Westminster. A dark-complexioned, strumous-looking lad. Has three cicatrices on his left arm, which present nothing different from recent vaccination marks. There are a few small scattered spots of acne on the shoulders and upper part of chest.

3. Male, aged nineteen, a warehouseman in the City, a healthy-looking lad. Has an unhealed ulcer, larger than a shilling piece, on the right arm, resulting from vaccination. The sore is covered by a crust, which is disposed to scale slightly, and its base is leathery. Nothing else can be detected.

Mr. Hutchinson states that this is the last case traced of the series related on April 25th, and therefore treatment was commenced later than in the others. He also informs us that in the above three cases the vaccination sores all healed, and subsequently ulceration set in at some of them, which continued to spread slowly until mercury was given, when in about ten days they commenced to heal. Black wash was applied locally. The same sequence of events occurred in all the other cases of this group.

From the foregoing account it will be seen that neither the vaccinifer, nor any one of the three cases vaccinated from it, presented any symptoms of constitutional syphilis at the time of our examination. But whilst in case No. 2 the vaccination sores were healed, leaving nothing but the ordinary scars, in cases Nos. 1 and 3 there were still open ulcers at the site of the vaccination fourteen weeks after its performance. These ulcers were of a suspicious, but not of a conclusive, character.

Of the second series reported by Mr. Hutchinson in an appendix on May 9th, we have seen the vaccinifer No. 2, and three children vaccinated from it.

Vaccinifer No. 2, male, aged seven months. Had been used on February 13th for vaccinating the series of cases reported by Mr. Hutchinson on May 9th, and brought under his observation by Mr. Waren Tay. This child is hydrocephalic; its head is universally enlarged; the fontanelles are perhaps more open than usual. It is a pallid, delicate-looking child, and has a slight herpetic eruption on the forehead, but is very lively. It breathes hard through the nose; the mother says it has a cold, and is teething. There is a small white scar at the anus as if from an ulceration. The glands in both groins are large and separate. On the right arm are five vaccination marks, which are all healed.

The mother is a bright-complexioned, healthy-looking woman. Has never suffered from illness. This is her first child. She has never had a miscarriage, or discharge, or sore nipples. She says the child has been occasionally nursed by the landlady and her children. She knows that one of these was ill, and sent to Croydon for its health, and that the mother had attended a hospital in the Hackney-road, but she never heard what was the matter with either of them.

The father, aged twenty-seven, cabinet-maker, is a spare, pale man, but apparently in health. He had worked thirteen years in the same situation. He denies having had venereal disease of any kind, and readily submitted to examination without previous preparation. Nothing could be found except some enlarged separate glands in the left groin, and a slight white scar on the inside of the cheek opposite to the left molar tooth. The only illness he has ever had are measles and whooping-cough.

The following cases, which had been vaccinated from vaccinifer No. 2 on Feb. 13th, presented the appearances detailed below on May 16th—thirteen weeks afterwards.

1. E. T——, aged four years and a half, female (No. 2 in Mr. Hutchinson's second appendix). A pallid, thin, strumous-looking child. On the right arm are two sores covered by crusts. The larger of these has a circumscribed thickened base, which is superficial, and has a leathery feel when compressed; the surface of this is disposed to scale. The glands in the corresponding axilla are enlarged. There is a scaly eruption, consisting of small, circumscribed, for the most part circular spots, of a copper colour, at the back of the neck, the lower part of the abdomen, and the upper and outer part of the thighs; with a general scattered mottling of the trunk, on its anterior surface especially. The inguinal and post-cervical glands are large and distinct. Both the tonsils are excavated, but not now ulcerated.

* The Education and Employment of the Blind. London: Hardwicke. 1871.

2. A. E. T——, aged eighteen months, male (No. 1 in Mr. Hutchinson's appendix). A fat, well-grown, hearty-looking boy. On the left arm are two large dusky-coloured marks of vaccination, which are scaling on the surface, but not ulcerated; these have a thickened base precisely similar to the preceding case. There is a general mottling of the trunk, which is fading, and a few small scaly spots resembling those in foregoing patient, and scattered over the abdomen. The glands in each groin are very distinct. There is well-marked ulceration of both tonsils.

The mother of these children is a healthy-looking woman. She had not suffered from illness. A rigid cross-examination failed to elicit any history of previous syphilis in herself or either of her children.

3. W. C——, aged ten, male (No. 3 in Mr. Hutchinson's appendix. This case was not reported at the Royal Medical and Chirurgical Society). A spare lad, but not unhealthy in appearance; his mother says he has lost flesh lately. On the left arm the cicatrices of vaccination in infancy show plainly, and below these are two large sores covered with crusts, with well-defined thickened circumscribed bases, surrounded by a dusky areola. The glands in the corresponding axilla are enlarged. The inguinal and post-cervical glands are very perceptible to touch. There is a scaly eruption, for the most part in small annular patches, over the trunk and limbs, which is fading. On each tonsil is a deep vertical ulcer, with a grey unhealthy surface.

The mother is a tall, healthy-looking woman. She has never had any serious illness, and no history of previous syphilis in herself or her boy could be obtained. These three cases were vaccinated on the same day, and the ulcers resulting have never healed, but have slowly increased in size. There has been no treatment in any of them.

In our opinion these three cases present unequivocal evidence of constitutional syphilis, and we see no reason to doubt, from the appearances presented by the arms, and from the history of the cases, that the disease had been conveyed by vaccination.

As to the method in which vaccination was performed in these cases, and the character of the fluid inoculated, whether lymph, blood, or both, we could obtain no satisfactory evidence, and with regard to this question we may refer to the remarks made by Mr. Hutchinson in the appendices to his paper, where such facts as could be elicited are recorded.

(Signed) SAMUEL WILKS, GEO. G. GASCOYEN,
WM. S. SAVORY, THOMAS SMITH.

The following case was shown to Dr. Wilks by Mr. Hutchinson on May 19th, being one of the second series.

4. Female, aged fourteen (No. in Mr. Hutchinson's second appendix). There was a round red sore on the arm, raised and granulating. Over the body and arms was a well-marked eruption of bronze-coloured, scaly, raised spots. The tonsils were swollen, and slightly ulcerated.

(Signed) SAMUEL WILKS.

HOSPITAL OUT-PATIENT REFORM.

THE Committee appointed at the late meeting to carry out the resolutions for reforming the out-patient department of hospitals had a conference with the Council of the Charity Organisation Society on Monday last, when it was resolved that the Council should co-operate with the Committee, and accompany a deputation to the President of the Poor-law Board. The Committee also invited Dr. Stewart, the secretary of the Metropolitan Branch of the British Medical Association, and Dr. Rogers, of the Poor-law Medical Officers' Association, to accompany the deputation.

At the interview with Mr. Stansfeld, Sir Charles Trevelyan opened the proceedings, and gave a history of the movement. He drew attention to the extremely valuable reports issued by the Committee on out-patient reform, and said that the one on General Hospitals was drawn up on the soundest principles, and was highly honourable to the profession from which it emanated. The deputation asked for the assistance of the Poor-law Board on the ground that there should be no systematic gratuitous medical relief which was not under the control and supervision of the Poor-law authorities; and that it was most important that the Poor-law medical relief should be greatly improved.

Dr. Stallard, after giving a history of the out-patient system, which he said had grown to its present magnitude in consequence of the shortcomings of the Poor Law, drew attention to the recommendations of the Committee for the improvement of the Poor-law medical relief. Whilst admitting that great improvements had been effected, and many very well managed dispensaries had been recently introduced, there was still very much remaining to be done, and the Committee asked the President to put such an amount of pressure upon the guardians as to induce them to carry out the Metropolitan Poor Act uniformly throughout the metropolis. He thanked the President for having already fulfilled one of the recommendations of the Committee by issuing regulations for the government of these dispensaries; and they hoped he would adopt another by placing them under the charge of a special inspector, who should be authorised to visit them regularly, and report to Parliament annually as to their efficiency. Such inspectors would act as educational agents to the guardians, and obviate the necessity of putting any objectionable central authority in force. He further pointed out that the Committee did not wish to put all gratuitous medical relief under the Poor Law with the object of extending it to any class which ought to be called upon to pay for it; but rather to prevent persons from obtaining gratuitous assistance who were able to pay, the Poor-law authorities alone having the necessary machinery of investigation. The Committee further offered to the President a line to determine who were destitute, for if a man could not contribute a penny per week to a provident dispensary, he was undoubtedly in a position to require gratuitous relief.

Addresses were made by Mr. Timothy Holmes, Dr. Stewart, Dr. Rogers, and Dr. Hawksley. Dr. Stewart gave his experience as to the pauperising tendency of the present system. He suggested that this manufacture of paupers must be a matter of deep interest to the President of the Poor-law Board, and that the hands of those engaged in reforming it would be greatly strengthened if the President would ask the governing bodies of the hospitals and dispensaries for information, and express his opinion on the matter in Parliament or otherwise.

Mr. Stansfeld, who expressed himself as greatly obliged to the deputation for laying the facts he had received before him, said he was most desirous of meeting with members of these societies for the purpose of discussing these questions. He was convinced of the evils of which they had spoken, and he well knew the value of voluntary efforts in aid of the legal or regular forces in lessening those evils. Their opinion, as he gathered it, was that there should be no gratuitous medical relief, except under the Poor-law Board. The Poor-law Board could not control the free action of institutions supported by voluntary subscriptions, and this could only be done by appealing to the public, and by influencing the organs of public opinion to stop such evils by exposing their dangers. He stated that the Poor-law Board was proceeding to urge forward the dispensary system in town, under the Act of 1867, and even in the country, where the board had no power of enforcing its views on this point as yet, the system was being adopted by guardians, whom he had found generally willing to take advice. Speaking of a proposed "general system," he expressed his confidence in a local rather than in a centralised system, and he thought that, though local action caused delay sometimes, yet that, on the whole, it worked better than the over-ruling and over-governing found in a centralised system. He quite agreed as to the necessity of the provident dispensary system, but said it rested with the public.

The deputation thanked Mr. Stansfeld and Mr. Hibbert, M.P., for their attention, and withdrew.

DINNER TO MM. RICORD AND DEMARQUAY.

ON the 17th inst. a most touching demonstration took place at Willis's Rooms—a demonstration which does considerable credit to the *élite* of the profession of London, and which must have been most gratifying to the eminent men who were the subjects of the cordial welcome bestowed

upon them. The medical profession of France, who have just passed through such severe trials, will certainly hear with feelings of pride and gratitude that their brethren in this great metropolis seized upon this opportunity of warmly testifying sympathy for their suffering, and admiration for the manner in which they have borne the misfortunes of their country.

M. Ricord and M. Demarquay were, as is well known, the bearers from the French Government of expressions of regard to those amongst us who had spared neither time nor money to help the victims of the sad contest which has just been brought to a close. Nor could, under these circumstances, any better representatives of France have been chosen. These representatives, so eminent in their profession and so distinguished by their noble attitude during the struggle, belong to our common profession; and it was fit that the medical men of London should receive them with the generous warmth which is so characteristic of British hearts.

The dinner at Willis's Rooms was organised in a very short time, and the call was quickly responded to by the most eminent members of our body, Sir William Fergusson, Bart., having consented to take the chair. Among the guests were especially noticed a great many of M. Ricord's old pupils, who were happy to see the eminent syphilographer, unsubdued by years, meet them with the same sprightliness as in times gone by.

After the loyal toasts, Dr. Burrows proposed the "Army and Navy, and those who had done duty with the contending armies," to which Sir Alexander Armstrong and Dr. Gordon answered in a very apposite manner. The latter, who had been sent to Paris with Mr. Wyatt by our Government, dwelt especially on the assistance offered him by M. Demarquay, without whose help he could hardly have fulfilled his mission.

The President gave, in an eloquent speech, the toast of the evening, and paid to the eminent guests a tribute of high estimation for their professional worth, and the noble manner in which they had acted during the siege. Sir William went as far back as the siege of Troy and the first siege of Metz, to show how important were the services of medical men, especially instancing Ambrose Paré. The Paris school, he remarked, was deserving of our thanks, for some of the great discoveries which had benefited the profession and mankind had been made by its *élèves*. Sir William then turned to MM. Ricord and Demarquay, and begged them to accept the hearty welcome of their professional brethren assembled around them.

The toast was received with enthusiastic cheering, which was long continued, and a sufficient proof that all present joined with the liveliest feelings in the sentiments expressed by the President.

M. Ricord, who was greatly cheered on rising, read a speech in English which was characteristic of himself. He said that, seeing so many of his pupils, he fancied himself lecturing under the lime-trees of his hospital. M. Ricord gave a sketch of the hard work done by medical men during the siege, and eulogised the British members of the profession who had helped them. Highly flattering remarks were made on English surgery, Hunter and Bell being especially mentioned, and M. Ricord expressed a hope that close union would always exist between the members of the medical profession on both sides of the channel. This speech was received with the loudest approval.

M. Demarquay followed, in French, and sketched in forcible language the medical events of the two sieges, and the perils which the surgeons had encountered in various ways. He, too, trusted that the French and English nations would work in peace for the advancement of science, and especially for the improvement of medicine.

Mr. Paget subsequently proposed the toast of "The Society for the Sick and Wounded" in one of those impressive speeches to which he has long accustomed us. Count Serrurier answered in the absence of Count Flavigny, and gave, in French, a sketch of the labours of the Society.

Dr. Gull then proposed "The Press," showing, as Mr. Paget had done, how much the madness of waging war was to be deprecated, and passed a compliment on the secretaries.

Dr. Russell, of *The Times*, responded in a suitable manner.

The evening drew to a seasonable close after an interchange of goodwill and gratitude which, we trust, the future will strengthen. Much has been said by intemperate or unthinking journalists in Paris of the coldness with which England witnessed the disasters of her nearest ally; but these unwarranted statements have received a refutation in meetings such as those at the Crystal Palace, at Greenwich, and in London, which must silence for ever the voice of jealousy or chagrin.

Correspondence.

"Audi alteram partem."

DR. SAYRE'S OPERATION.

To the Editor of THE LANCET.

SIR,—I am very sorry to see in your journal of July 15th a letter from Mr. Barwell on "Dr. Sayre's Subperiosteal Exsection of the Hip-joint." He seems to have completely misunderstood the entire plan of my operation, and has most certainly failed altogether to perform it in such a manner as would give it a fair chance of success. I have discussed some of the questions raised in his letter in a lecture which the surgeons of St. Bartholomew's and the Children's Hospitals did me the honour to request me to give on Saturday last. I would beg to refer Mr. Barwell and your readers generally to the report of it, which will appear elsewhere.

Mr. Barwell has had my extension splint for several years, but has been unsuccessful in its use because he applied it in a reverse position. He seems equally unfortunate in comprehending my method of subperiosteal exsection.

I am, Sir, very respectfully yours,

Bath Hotel, Piccadilly, July 17th, 1871. LEWIS A. SAYRE.

INFECTION FROM THE DEAD.

To the Editor of THE LANCET.

SIR,—As a discussion has lately arisen on the chances of infection from the dead, and as the question is one of no little importance, I think it desirable to draw the attention of your readers to such a case in the last number of Virchow's *Archiv* (June 23rd, p. 136). The case is reported by Virchow himself, in a short communication upon the contagiousness of typhus. Among other instances is mentioned, No. 10, Wiegand, a servant in the Pathological Institute, charged especially with the care of the dead. This man was taken ill with typhus, probably from one of the fever patients who died on April 20th. The body was not opened, but was laid in the cellar of the Pathological Institute. On May 18th Wiegand likewise fell ill of typhus and died on the 30th. Virchow adds that this attack was very remarkable as, so far as could be ascertained, Wiegand had only been brought into contact with the typhus patients after death.

I am, Sir, yours, &c.,

Leeds, July 17th, 1871. T. CLIFFORD ALLBUTT.

MR. KEMPSTER'S CASE.

To the Editor of THE LANCET.

SIR,—I think I may fairly ask you for a small space in your journal, to enable me to explain several matters which do not come out clearly in the report of my recent case at the Medical Council.

In the first place I have to thank the Medical Council for the great impartiality evinced by them during the investigation, and their kindness at the termination of the case, and more especially the President, who conducted the proceedings in a judicial manner worthy of our most distinguished judges.

But I still feel that I have grave cause of complaint against the Medical Council, or rather against the English Branch Council, in their not having given me any intimation that certain charges were made against me, and were being investigated by them. I ought to have been invited to tender an explanation, which I should have readily done, and after which I am sure that the case would never have assumed the complexion it did.

It was mentioned that the Council were obliged to frame the charge as one of "infamous conduct in a professional respect," as they have no power to erase a name from the Register for any other cause; but surely the fact that they can pass but one sentence—that of professional extinction—should render them careful not to put their powers lightly or too readily into force, as they must be aware that the fact of having been tried on such a charge might, to many men, be absolute ruin.

No notice has been taken of the fact that Mr. Goodson was, during the time embraced by the charges, a medical student attending hospital practice and lectures, and that he is now qualified.

It was also not sufficiently understood that a "medical certificate of death" is not a legal document in the usual acceptation of the phrase, as it is not required by, or mentioned in, any of the numerous Acts of Parliament relating to registration, and is merely a form issued by the Registrar-General for the convenience of the local registrars, and the only information in it of vital importance is the *cause* of death. I am, Sir, yours obediently,

Battersea, July 18th, 1871. W. H. KEMPSTER.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At a meeting of the Council on the 13th inst., the following gentlemen (admitted Members in April and August, 1840, respectively) were elected Fellows of the College:—

Porter, John Taylor, Sheffield.
Gleadall, James, Sheffield.

Mr. Quain reported the proceedings of the General Medical Council at its last meeting, and the thanks of the Council were voted to him for his services. The thanks of the Council were also voted to Sir William Fergusson, Bart., for his efficient services as president during the past year. Mr. Charles Hawkins's motion, "That a committee be appointed to consider and report to the Council if any alteration should be made in the wording of the several diplomas now granted by the College or in the mode of issuing them," was carried. Mr. Quain gave notice of the following motion at the next meeting of the Council—viz., "That a committee be appointed to investigate the expenses of the College in all its departments, and report thereon, with a view to the diminution of expense, where practicable."

The following gentlemen passed the primary examinations in Anatomy and Physiology at meetings of the Court of Examiners on the 18th and 19th inst.:—

R. H. Stowers, L. A. Holden, R. S. Bridges, G. T. B. Moffatt, W. C. G. Collins, and J. M. Hart, St. Bartholomew's; James Ritchie, Francis Imlach, H. M. Church, and E. Hinchcliff, Edinburgh; J. C. Irving, J. R. Burton, H. J. F. Groves, W. Y. Davenport, R. D. Hughes, J. H. Townend, and E. M. Boddy, Guy's; G. W. Bell, C. K. F. Williams, W. D. Strang, G. R. Steil, W. E. N. Erith, P. Bradford, H. C. Lang, H. Rugg, Oliver Barber, J. G. R. Symons, R. St. M. Dawes, and M. Eskell, University College; A. J. Vause and A. E. Kirby, Leeds; R. C. Fair, Canada; J. D. Jennings, Birmingham; M. J. Fitzpatrick, Dublin; F. W. Cory and F. Johnson, London Hospital; I. B. Stuart, Liverpool; C. Hartley, Charing-cross Hosp.; C. F. Grindrod, St. Mary's; D. Nunez, Guy's and Paris.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on July 13th:—

Briggs, Henry Myddleton, Birmingham.
Lyons, Isidor Isaac, St. John's-wood.
Richards, Geo. Pickering, Newman-st., Oxford-st.
Rix, Benjamin, East Meon, Hants.
Thornton, William Pugin, Canterbury.
Williams, Edward, Llandyssul, S. Wales.

As Assistants in Compounding and Dispensing Medicines:—

Gould, Eli, Reddal-hill, near Dudley.
Holmes, Nathaniel W., Chorlton-on-Medlock.
Pollard, William, Wakefield.

On the same day the following gentleman passed his first professional examination:—

Garrard, William Arthur, Guy's.

COLLEGE OF PHYSICIANS, IRELAND.—At examinations held on the 10th, 11th, 12th, and 13th of July, the following gentlemen obtained the licences in Medicine and Midwifery:—

MEDICINE.—Robert Boxwell, George Frederick Duffey, John Hallilay, Francis Meagher Harricks, David James Freeman, Joseph Henry Lockwood (Calcutta), Andrew Bernard Morris, Herbert Mandeville Nash, Henry Albert Pattinson, Frederick Stevenson Tellet, Hugh George Webb.

MIDWIFERY.—Robert Boxwell, George Frederick Duffey, David James Freeman, Francis Meagher Harricks, Joseph Henry Lockwood, Patrick John Molony, Andrew Bernard Morris, Herbert Mandeville Nash, Fredk. Stevenson Tellet, William Ratcliffe Tolerton.

THE Emperor of Brazil repeated his visit to the Brompton Turkish Bath on Monday last, at the early hour of six in the morning. On leaving he expressed himself much gratified with all the arrangements, as also with the comfort he derived upon each occasion of taking the bath.

THE SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—At a quarterly Court of Directors held on the 12th inst., Dr. Burrows, president, in the chair, grants to the amount of £1278 10s. were made to fifty-five widows and forty-five children. Two widows and three children were added to the list. The death of one recipient of grants was announced. Two members were elected, and five proposed for election at the next Court to be held in October.

NOTICES OF MOTION.—Mr. Pell has given notice of proposing that the efficient working of the Vaccination Amendment Act would be promoted by the contribution of a considerable proportion of the expenses from moneys to be voted by Parliament. Mr. Thomas Chambers, Q.C., has given notice of a motion that it is not expedient to enforce vaccination by legislative penalties. Sir Charles Adderley has given notice of his intention to introduce a Bill to consolidate and amend the laws relating to public health and local government.

THE BRITISH ASSOCIATION.—The arrangements for the meeting of the British Association in Edinburgh are now nearly completed. The sections will be accommodated in the various class-rooms of the University, and it is expected that the Great Hall of the Parliament House will be used as a reception room. The first general meeting of the Association will be held in the Music-hall on Wednesday evening, August 2nd, at eight o'clock, when Professor Huxley will resign the chair, and Professor Sir William Thomson will assume the presidency and deliver an address.

THE WEST LONDON HOSPITAL.—On the 15th inst. the east wing and central building of this hospital were opened for the reception of patients by his Grace the Duke of Devonshire, who laid a "memorial stone" in honour of the occasion. The hospital was originally instituted as a Hammersmith Dispensary, but in progress of time has grown to its present very considerable dimensions, and will shortly contain 100 beds. On Saturday his Grace and other distinguished visitors were received in the board-room by the committee, and conducted in procession to inspect the new wards, after which an address descriptive of the history and usefulness of the charity was read by the Rev. R. G. Baker, of Fulham, one of the vice-presidents, whose interest has further been evinced by a donation of £1400 from Mrs. Baker for the completion of a female ward with every modern improvement. The new wards will afford room for a much needed expansion of the in-patient department; but the income is not sufficient to meet the demands that will thus be occasioned. Apart from building expenses the hospital is at present in debt to the sum of £1010.

DEATH OF JAMES NEWLANDS, C.E., of Liverpool.—We make an exception in noticing the death, on the 15th inst., of Mr. James Newlands, for upwards of twenty-four years the borough engineer of Liverpool. He was one of the most distinguished sanitarians of his time; and it is no small tribute to his genius to state that he recommended the intercepting system of sewers, helped to determine the proper form of sewers, invented the trough watercloset, and comprehended sewage irrigation in the sanitary scheme prepared by him for Liverpool nearly a quarter of a century ago. Mr. Newlands was a man of the highest culture and of the widest views. He had a horror of piecemeal work; and although, like many other distinguished men, he had his crotchets, few men have made fewer mistakes. It has been our misfortune to differ from him, but we did so with a full appreciation of his great ability; and we conclude with expressing our conviction that Liverpool has lost one of her most distinguished townsmen.

Medical Appointments.

ATKINSON, A., M.R.C.S.E., has been appointed a Surgeon to the Hull and Sculcoates Dispensary.

BAKER, A., L.R.C.P.Ed., has been appointed Medical Officer for the Askrigg District of the Aysgarth Union, Yorkshire.

CONNOR, S. J., L.K.Q.C.P.I., has been reappointed Medical Officer to the Carlow Fever Infirmary.

DAVIES, A. E., Ph.D., F.C.S., F.L.S., has been appointed Analyst for the County of Worcester.

DUNLOP, A., M.D., has been appointed Honorary Medical Officer to the Jersey General Dispensary.

FARMER, J., M.R.C.S.E., has been appointed Medical Officer for the Workhouse of the Brackley Union, Northamptonshire, vice Richard Jones, F.R.C.S.E., resigned.

FITZGERALD, C.E., M.B., C.M., has been appointed Assistant-Surgeon to the National Eye and Ear Infirmary, Dublin.

HAYWARD, H. H., M.R.C.S.E., L.D.S., has been appointed Dental Surgeon to St. Mary's Hospital, vice E. Sercombe, M.R.C.S.E., L.D.S., resigned.

HOCTOR, R. B., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for District No. 1 of the Brackley Union, vice Rich. Jones, F.R.C.S.E., resigned.

HOLDEN, J. F., M.R.C.S.E., has been appointed a Surgeon to the Hull and Sculcoates Dispensary.

MARRECO, A. F., M.A., F.C.S., has been appointed Professor of Chemistry at the Newcastle-on-Tyne College of Physical Science in connexion with the University of Durham.

NICHOLSON, R. H. B., M.R.C.S.E., has been appointed a Surgeon to the Hull and Sculcoates Dispensary.

NUNNELEY, F. B., M.D., M.R.C.P.L., has been appointed an Assistant-Physician to St. Mary's Hospital, vice Wm. Henry Broadbent, M.D., F.R.C.P.L., promoted to Physician.

OWEN, E. B., M.R.C.S.E., has been appointed Assistant-Surgeon to St. Mary's Hospital, vice J. B. Lane, F.R.C.S.E., promoted to Surgeon.

PALFREY, J., M.D., has been appointed Physician-Accoucheur to the Out-Patients at the General Lying-in Hospital, York-road, Lambeth, vice A. Meadows, M.D., resigned.

POOLE, W., M.R.C.S.E., L.R.C.P.Ed., has been appointed Medical Officer for the Templenewsam Parish of the Hamalet Union, vice E. W. Tinsdill, deceased.

PRICE, T., L.K.Q.C.P.I., M.R.C.S.E., has been appointed Assistant Resident House-Surgeon to the East Dispensary, Liverpool, vice Ollive Sims Shaw, M.R.C.S.E., resigned.

REECE, J. R., M.R.C.S.E., has been appointed Consulting Surgeon to the Glamorganshire and Monmouthshire Infirmary, Cardiff, on resigning as Surgeon.

SHEEN, A., M.D., M.R.C.S.E., has been appointed a Surgeon to the Glamorganshire and Monmouthshire Infirmary, Cardiff, vice J. R. Reece, M.R.C.S.E., resigned.

SKEGG, J. J., L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer of Health for St. Martin-in-the-Fields, vice Lionel Beale, M.R.C.S.E., deceased.

SKINNER, S., M.D., has been appointed one of the Medical Officers to the Clevedon, Walton, and Tickenham Dispensary, vice T. Davis, M.D., resigned.

SWAN, R. J., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 2 District of the Northleach Union, Gloucestershire, vice T. S. Stott, M.R.C.S.E., resigned.

WILSON, H., F.R.C.S.I., has been appointed Junior Surgeon to St. Mark's Ophthalmic Hospital, Dublin.

WORKMAN, C. J., has been appointed Ophthalmic Surgeon to the Teignmouth, Dawlish, and Newton Infirmary.

Births, Marriages, and Deaths.

BIRTHS.

BLANDFORD.—On the 15th inst., at Grosvenor-street, Grosvenor-square, the wife of G. Fielding Blandford, M.D., of a daughter.

BOGGS.—On the 14th inst., at Paris, the wife of Alex. Boggs, M.D., late of H.M.'s Indian Army, of a daughter.

SANDS.—On the 15th inst., at Holland-road, Brixton, the wife of John Lee Sands, M.D., R.N., H.M.'s Ship "Excellent," of a daughter.

SMITH.—On the 17th inst., at Castle-street, Dumfries, the wife of John Smith, M.B., of a son.

WRIGHT.—On the 8th inst., at The Hollies, Sanmer-hill, Birmingham, the wife of M. Hall Wright, M.R.C.S., of a son.

MARRIAGES.

PEPPIN—HERDMAN.—On the 12th inst., at Walcot Church, Bath, Henry Cole Peppin, Staff Assistant-Surgeon, second son of the late Arthur Benford Peppin, Garrison Surgeon of Trichinopoly, to Agnes Clara, second daughter of James Herdman, Esq., of Camden-crescent, Bath.—No Cards.

TEEVAN—ROBINSON.—On the 11th inst., at Christ Church, Kensington, Wm. Frederic Teevan, F.R.C.S.E., to Georgiana, daughter of the late Francis Robinson, Esq.

DEATHS.

COLLINS.—On the 19th inst., at Woodhill, Portishead, John H. Collins, F.R.C.S.E., District Surgeon East Indian Railway, aged 54.

LEE.—On the 26th ult., at St. Brelade's Bay, Jersey, L. J. Lee, M.R.C.S.E., late of Bishopsgate-street Within, aged 81.

NEILSON.—On the 15th inst., C. Neilson, L.R.C.S.I., of Killala, Co. Mayo, aged 74.

MILES.—On the 16th ult., at Colaba, Bombay, Dr. H. Miles, Surgeon, R.A., aged 88.

PRITCHETT.—On the 18th inst., G. W. Pritchett, M.R.C.S.E., of North-hill House, Plymouth, Surgeon R.N., aged 65.

REYNOLDS.—On the 16th inst., at Appledore, Devon, William Reynolds, M.R.C.S.E., late of Wellington, Somerset, aged 50.

Medical Diary of the Week.

Monday, July 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, July 25.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Wednesday, July 26.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, July 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.

Friday, July 28.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Annual Meeting and President's Address.

Saturday, July 29.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

TYPHOID FEVER AT PEMBROKE CAMP.

In the last Army Medical Blue-book there is a short report on an outbreak of typhoid fever among the troops stationed at the Camp of Pembroke Dock, which serves to illustrate the occasional difficulties in tracing out the origin and causes of this disease. It commenced on 15th January, 1870, and by the 11th March following 21 cases of enteric fever had occurred, with 4 deaths. The symptoms and post-mortem appearances in the fatal cases left no doubt whatever as to the nature of the disease. Dr. Massy, the head of the sanitary branch, made an inspection of the Camp in March, and it was clear from his report that he entertained a very strong suspicion that the drinking-water was the vehicle of the poison. All the cases occurring in camp lived in the North Camp, except two children. The most careful inquiry failed to trace the extraneous origin of the disease; the three first cases had been several months at the station. Both divisions of the camp are similar in huts and soil, and nearly so as regards occupation. There are no sewers in either division except from the latrines, and neither of these has a course through the camp. Unfortunately the vessel containing the specimen of water from the superficial well was broken in its transit to Netley, and an interval of six days took place before a second specimen was forwarded, and this proved on analysis to be of good quality. The use of the suspected water was prohibited, and it is significant that no cases occurred subsequently, except such as would have come within the incubationary period of typhoid fever. The latrine of the North Camp was kept as clean as such places usually are, although it was offensive at times, and the direction of the prevailing wind would have carried the air from this latrine over the camp. It was to the position of this latrine, and the pollution of the atmosphere by it, that the Army Sanitary Committee mainly attributed the outbreak of the fever.

Rustless.—It is a solution of permanganate of sodium, and acts on organic matter by its oxidising powers.

BABY-FARMING.

THE Select Committee which has been inquiring into the subject of baby-farming has, it is said, found that baby-farms exist to a large extent in London, Edinburgh, Glasgow, and Greenock, and will probably recommend the establishment of compulsory registration of births and deaths within a limited time after their occurrence; permissive registration of any homes into which children are taken in to nurse, which should be open to inspection by the police, and which should be licensed, the licences to be subject to forfeiture or suspension in case of misconduct; compulsory registration of lying-in establishments, which should be licensed on certain conditions, one of which should be the right of inspection by the police by day or night (if by night, on the warrant of a magistrate); all children born or dying in such establishments to be registered within a week of birth or death.

A Subscriber of Fifteen Years' Standing.—Messrs. Churchill, New Burlington-street.

A CASE OF POST-PHARYNGEAL ABSCESS.

To the Editor of THE LANCET.

SIR,—As the following case is not an everyday occurrence, and may prove interesting to a number of your readers, I send you a brief account of it for insertion in THE LANCET.

On the morning of the 12th instant there called at my surgery J. B——, a pale, anxious-looking, somewhat emaciated boy, aged fifteen years. He sat with his head fixed in one position, the right ear inclined towards the corresponding shoulder, and the chin tilted towards the opposite side, simulating the posture of a case of wry-neck or atlo-axoid disease. However, there existed no spasm of the sterno-cleido-mastoid muscle, and the boy could straighten his neck, rotate the head laterally, and nod, when desired, without pain. He directed my attention to a subcutaneous swelling about the size of a filbert, situated over the sterno-mastoid muscle, two inches below and in a direct line from the tip of the mastoid process, which was evidently an enlarged lymphatic gland, and complained of "something" in his throat which prevented his swallowing solid food easily, and interfered very much with his breathing, particularly at night when he lay down. The power of opening the mouth was somewhat restricted; his voice also had a nasal twang; he was decidedly feverish; skin hot; pulse 120, and feeble; almost no appetite, and was gradually losing flesh and strength. About ten weeks ago he began to complain of a "stiffness" at the back of the neck, and had then been observed snoring loudly and in a peculiar manner during sleep, and even at church when awake.

On examining the fauces, the nature of the case was at once obvious. The posterior wall of the pharynx projected forwards so far that it came in contact with the uvula and posterior pillar of the fauces (palato-pharyngeus muscle), completely closing the openings of the posterior nares, and obliterating the upper part of the pharynx.

The immediate treatment was, of course, very simple. Assisted by the family medical attendant, and using a curved bistoury, the blade of which to within about an inch of its point had been previously covered with adhesive plaster, I opened the abscess freely in the median line. The patient instantly experienced relief; a considerable quantity of laudable pus came away at the time, and much more during the evening while he was eating bread. He has enjoyed sound refreshing sleep for three nights, which he had not done for weeks before; the feverishness is much abated; he is looking cheerier, and not so pale; the discharge continues free. He is using an ordinary astringent and antiseptic gargle; is advised to stoop occasionally to facilitate the discharge of the pus, and his nutrition is being attended to. Altogether, in the meantime, he promises fair to make a satisfactory, though perhaps not a rapid, recovery.

Yours faithfully,

Airdrie, July 15th, 1871. JOHN EATON, M.D., C.M.

A CORRESPONDENT (St. John's-wood) is directed to make the inquiry of his usual medical attendant, who must be best qualified to afford him information as to the name of any particular surgeon he should consult in the matter.

X. Y. Z.—Cases of so-called English cholera occasionally mimic those of the Asiatic form so closely that they would, if arising during the prevalence of epidemic cholera, no doubt be attributed to the latter.

THE SANITARY STATE OF THAME.

To the Editor of THE LANCET.

SIR,—If the parties who supplied you with the information relative to my want of courtesy to a professional brother had made you accurately acquainted with the circumstances under which my observations were made, I do not think you would so have charged me. We have been suffering from an epidemic of scarlet fever, the origin and course of which was perfectly clear. A medical man takes upon himself the responsibility of summoning Dr. Buchanan, a Government inspector. The question asked was—Is it intended we should assume that Dr. Buchanan is summoned on account of the supposed connexion of the sanitary condition of the town with the scarlet fever epidemic? If so, it is a disingenuous proceeding, and any report originating on that supposition would be false and disingenuous also to that degree that it was the peg on which the whole thing hung. In what have I offended against courtesy in pressing for an answer? And was it not open to the gentleman who did summon Dr. Buchanan to state the reasons for his so doing? The epidemic has spared almost every part of the place which would have been supposed to be most liable, and fallen principally on the well-to-do. Besides, if our drainage has been the thing in fault, I should have supposed that typhus was more likely to have been the product.

I am, Sir, your obedient servant,

Thame, Oxon, July 17th, 1871. HENRY WELLS REYNOLDS.

*** The facts upon which we commented were contained in the report of the public meeting which appeared in the *Bucks Herald*, and were not "supplied" to us by any "parties" whatever. We have nothing to do with the motives of those who were the means of bringing Dr. Buchanan to Thame. All that we were and are concerned about is, that our correspondent is reported to have applied the epithets "false and disingenuous" to Dr. Buchanan, and this we hold to be entirely indefensible.—ED. L.

REVACCINATION.

To the Editor of THE LANCET.

SIR,—I am glad to see your columns opened to remarks upon this important subject. These remarks may not in all instances be founded upon a large number of cases; but I humbly submit that this may be no loss to their value, but may, on the other hand, enhance it, from the fact that the observation of cases may be better carried out. Many similar communications may possibly be forwarded, and therefore I will follow Dr. Farquharson's example (THE LANCET, July 8th) in condensing my opinions into as small a compass as possible.

The utility and remarkable benefits of revaccination may be taken as proved; so I proceed at once to say that my cases amounted to 300 in number, extending from February to May of this year. Of these, by far the greater number were adults, but some varied between the ages of ten and twenty. In all, marks of vaccination were more or less distinct; but this did not appear to furnish any rule as to the success of the operation, for with precisely the same lymph, inserted at the same time, the development of vesicles varied much in intensity, in rapidity, and in ultimate desiccation. It was very remarkable to see a person with three or four good cicatrices, well and deeply foveolated, much more susceptible of revaccination than another who perhaps had only one mark equally good. I found, however, that my cases very fairly proved that the *area* of the cicatrix was a great guide; one cicatrix of large size, as a rule, affording more protection than three marks, whose combined area did not equal that of the single one.

Fully two-thirds of the cases were perfectly successful—that is, having good vesicles, although running a somewhat more rapid course. Of the remaining third, half the number only showed spurious vesicles, attended with considerable redness of the surrounding skin, and the other half were insusceptible. In this latter half are comprised all the cases under fifteen years of age; for in no case, even when the operation was performed under the most favourable circumstances, and repeated after an interval of a week, did I succeed in revaccinating one of these subjects. In all successful cases there were constitutional symptoms of greater or less severity on the fourth and fifth day, with attendant irritation of axillary glands. These symptoms I look upon as signs of the efficacy of the operation, and in no case of perfect vesicles were they absent. In three or four cases where I inserted lymph direct from the heifer, the shivering, depression, and general malaise were very severe. Three cases only were troublesome from erysipelatous symptoms, and these occurred in young men who used their arms too much, and dabbled in cold water. A simple purge, an evaporating lotion, with rest of the arm in a sling for three or four days, was all that was necessary.

The lymph was derived from infants' arms, capillary tubes, and from arm-to-arm in revaccination cases. The result was satisfactory in all the instances; nor did I find any difference between infantile, tube, and revaccination lymph, the last-named being taken at the proper time. I used no dried lymph. The method of insertion was by three scratches with Weir's vaccinator, high up over the deltoid. The lymph was then well rubbed in while the skin was stretched, and the wounds thus opened to the matter. A fourth insertion was then made with the point of a lancet either on the same arm or independently on the other arm. The reason for this was, that as in the arms where scratching is used there is in each place an approximation of the edges of several vesicles, and the external character is not so well marked, so the true nature of the vesicle was proved by the single puncture, which only produced a rounded vesicle.

With infantile and tube lymph the course of revaccination is either true to the eight days, or slightly retarded; but with revaccination lymph the course is somewhat hastened, the sixth or at latest the seventh day being the proper time to take the matter. The protective qualities of this lymph are doubted by many, and the insertion of it during small-pox epidemics has even been called "criminal." I can only say that if long observation of true vesicles produced by infantile arm-to-arm vaccination, and general attention to the subject in other ways, give me any right to form an opinion, then that opinion is, that I have produced true and perfect vesicles from revaccination lymph, and that such vesicles have stood the test of small-pox contagion within the last three months. The vesicles resulting from the use of this lymph are denounced as bad if they do not run a regular course; they are called spurious, and all kinds of hard names; but my experience shows me that in infantile vaccination there are all sorts of vagaries both with reference to the early or late development of vesicle, the period proper for taking lymph, the crusting, and desiccation. May we not then reasonably suppose that, if this is the case in infants, it may also happen in adults? I maintain therefore that, with proper watching, we may revaccinate from the arms of adults, and that this same revaccination lymph, if inserted into the arm of an infant, will produce Mr. Ceely's "pearl upon the rose."

The proper period of life for revaccination would appear to be from the age of puberty to twenty-three or twenty-four years of age. The extreme difficulty of revaccinating children with good marks before the former age indicates that the primary vaccination is still protective, and only gradually wears off. In persons insusceptible of revaccination, I frequently ascertained that their primary vaccination was performed after they were ten years old. If vaccination were first infantile, and revaccipation were performed at puberty, we should quickly "stamp-out" small-pox.

I take exception to that part of Dr. Farquharson's paper which treats of the preservation of lymph in tubes. I venture to think he was supplied with very inferior ones, badly made, badly filled, and badly sealed. I do not think his experience would be supported by men who have been constantly in the habit of using lymph stored in this way. I have on many occasions used lymph which I have preserved for three and four years; I have inserted the lymph from these tubes, and the result has been the production of vesicles which not even the most practised eye could distinguish from those of arm-to-arm vaccination. I have sent tubes six months old to India and China, and these have earned the gratitude of the recipients for their excellent qualities. I always procure my tubes from Edinburgh; they are recommended by Dr. Husband and Mr. Ceely, are of good calibre, straight, and free from dust. I only fill one-third of the tube, and, after shaking the lymph into the middle, seal the ends in the edge of the flame of a spirit-lamp. If a bulb forms (which is very rare in good tubes) I break it off, and reseal the tube. If for the future Dr. Farquharson follows this plan, I think he will have reason to congratulate himself on his success, and not be subjected to disappointment.

Yours truly,

THOMAS NEWHAM, M.D.,

Winslow, Bucks, July, 1871. Public Vaccinator.

EMIGRATION.

THE Thirty-first Report of the Emigration Commissioners shows that 256,940 emigrants left the United Kingdom during the year 1870, of whom 41 per cent. were of English, and 36 per cent. of Irish origin. There has been a marked increase in English emigration during the last two years, mainly attributable to the efforts of societies, associations, and individuals to promote the emigration of deserving persons of the labouring classes. The proportionate emigration to the population of the three divisions of the kingdom was—from Ireland, 1·33 per cent.; England, ·48 per cent.; and Scotland, ·71 per cent.; so that Ireland contributes relatively a far larger share to the annual outflow than the other two divisions.

A. B.—The qualification will not, in our opinion, be considered sufficient.

UNQUALIFIED ASSISTANTS.

To the Editor of THE LANCET.

SIR,—I beg most emphatically to protest against the conclusions drawn by "General Practitioner" from the decision of the Medical Council in the case of Mr. Kempster. I cannot see how that decision in any way confers an official sanction of the use of unqualified men.

Your correspondent endeavours to make a comparison between the medical student who acts as dresser and the unqualified assistant in a private practice. But there is no comparison. The dresser does not, except in very exceptional instances, do more than carry out the instructions of the house-surgeon or the surgeon; no patient is ever under his sole care for thirty-six hours. The clinical clerk's duties are still more restricted; he only takes the notes of the case, and has nothing practically to do with the treatment of the patient. What are, on the other hand, the duties of the unqualified assistant? The advertisements tell us he must be able to visit, dispense, and attend midwifery. He has in large practices in manufacturing districts almost the sole charge of the club and parish patients; the principal naturally looks after the private ones. The assistant is engaged not so much to assist the principal in a subordinate and restricted degree, but rather to enable the principal to extend his private practice.

Your correspondent states that the unqualified assistant has, as a rule, had a preliminary training at a medical school, and has either been prevented from pursuing his studies, or has failed to satisfy the examiners, usually in the more recondite subjects. I am convinced that an extremely small number of those who have been prevented by unforeseen circumstances from continuing their studies ever become unqualified assistants, but rather choose another walk in life, and that by far the larger number of unqualified assistants owe their origin to failure at the examining boards. Now, I venture to ask what confidence can be placed in a man who has either not the brains or the application to pass the ordinary examinations of one or other of the licensing bodies? I am at a loss to know what subjects your correspondent considers as the more recondite in the examinations of the Royal College of Surgeons of London or Edinburgh, of the Apothecaries' Hall, or of either of the Colleges of Physicians. The proof that the minimum of knowledge only is required is that endeavours are being made to improve the examinations. That the unqualified assistant usually belongs to the class I have just mentioned is, I think, shown by the termination of many advertisements for one—viz., "must be of sober, steady habits."

I think that "General Practitioner" places the average income from a practice at about £200 a year too low, and that surgeons would always be able to pay for the services of a qualified man were they but to unite in refusing to accept club and parish appointments at the present very low rate of pay.

As to posting up the books, that is an affair which clearly belongs to the principal, and in which the assistant, whether qualified or unqualified, cannot be expected to take a very lively interest, as probably upon his £40 or £60 a year he is doing two-thirds of the practice.

I do not for one moment admit the qualified assistant to be one jot less efficient than the unqualified one, and am glad to hear Dr. Langley state that fewer unqualified men are now employed. I am surprised to find a medical man defending, at a time when we are seeking to raise the status of the profession, a class whose student life has been a failure, and in most cases a preventable one.

I remain, Sir, yours, &c.,

July 18th, 1871. R. H. L.

Mr. Wm. Weld Phillips.—*Cæteris paribus*, our correspondent would seem to have a prior claim; but the question would not turn upon mere residence within the union.

A CORRESPONDENT observes that in the trial of Pook it was remarkable that, although epileptic seizures were supposed to account for the blood found upon the clothing, no allusion was made to the very common association of epilepsy with homicidal mania.

Killarney.—The subject shall receive our attention.

Mr. John Potter, C.E. (Manchester) is thanked; but it is not our practice to insert communications on such subjects except from members of the medical profession.

CHOLERA.

To the Editor of THE LANCET.

SIR,—Seeing in your last issue an annotation concerning a doubtful case of cholera, I think it may be useful to mention a case which came under my observation about a month ago in Deptford, and which appeared to me to be true Asiatic cholera, though of a mild type.

On the morning of June 17th last I was called to a young mechanic, about twenty-two years of age. I was told that he went to bed on the night of the 16th, quite well; but that about three in the morning the symptoms set in with ordinary loose purging, but the evacuations rapidly came to consist merely of pale straw-coloured liquid; at the same time he commenced to vomit liquid of a similar nature, and began to suffer very severely from cramps in the lower limbs. When I first saw him at ten A.M., the purging was less, but he continued to vomit the liquid *pleno rivo*. He was covered with a cold, clammy sweat; his voice was reduced almost to a whisper, and his countenance was of that dull leaden hue so characteristic of cholera. He subsequently made a good recovery.

I send these few particulars in order that each reader may form his own opinion about the case.

Yours, &c.,

New Cross, July 17th, 1871. FRANCIS S. TAYLER, M.B.

FATAL RESULT OF LEAP-FROG.

AT Walsall a boy playing at leap-frog got his arm broken. He was taken to the Cottage Hospital, where the arm was set by the sister in charge. He was then sent home, and kept in the house for two days. Thereafter he was allowed to go about. His parents were in very poor circumstances. On the fifth day his arm was very painful. On the sixth, symptoms of tetanus set in, and he died the same evening. A verdict of accidental death was returned. It would have been more satisfactory if the arm had been set by a surgeon, and if the surgeon (Dr. Maclachlan) who did see the case and dress it two days after the occurrence of the accident, had appeared to give oral evidence. Notwithstanding this lamentable accident, and the remarks of the coroner as to the danger of boys playing in the streets, we suspect that boys will still be boys, and that there will be little abatement in the sport of leap-frog.

Lucellum.—Our correspondent's claim is very doubtful indeed. If he attended ostensibly as the friend of his predecessor, the predecessor should claim.

PHYSIOLOGY OF THE BRAIN.

To the Editor of THE LANCET.

SIR,—Will you or any of your physiological correspondents be kind enough to answer the following questions.

1. Is it discoverable by dissection that there is any difference in texture or quality of the brain, or any part of it, between a highly cultivated intellect and one of less intellectual power?

2. What is the weight or proportionate quantity of brain required in a well-developed individual of average intellectual ability?

3. The muscles are strengthened and developed by physical exercise. The brain is not subject to any such exercise. Phrenologists speak of the "activity of the brain." What is meant by this expression? Is it that the brain, or some parts of it, are stimulated to action, and thus produces an impression on the skull either by its "activity" or its growth? Does the mind as a whole, or by means of any of its faculties, act upon the brain or any of its organs in such a way as to produce any "activity" or growth?

4. Is it true, as Dr. Spurzheim affirms, that the brain is divided into as many parts or organs as the mind has powers? The doctor says that "nothing is more easy than to prove this by dissection."

I remain, Sir, yours truly,

July, 1871. B. S. B.

*** In answer to our correspondent's inquiries, we may state—1. That in all probability there is a considerable difference between a highly cultivated brain and one that has received no cultivation, especially in regard to the quantity of water the cerebral substance contains, and, secondly, in regard to the number of nerve cells, which are the active agents of thought.—2. A man with a small brain, if his mind be steadily directed to one end, may achieve considerably greater distinction than another with a much larger mass of cerebral substance, though, *cæteris paribus*, the man with the larger brain would probably surpass the other in whatever direction his energies were directed.—3. Thought or mental activity is to the brain precisely what exercise is to the muscles; as these last grow by constant use, so does the brain substance (i. e., brain cells), we have little doubt, grow or multiply by constant mental labour.—4. There is a germ of truth in phrenology. There is every reason for believing that certain parts of the brain have different functions; some of these are known as probably the locality for speech, but the division of the mental powers at present adopted is far too imperfect to enable us to locate the so-called "passions" or "emotions" in different regions of the brain.—ED. L.

A CORRECTION.

Assist.-Surgeon Dr. Ambrose (58th Regiment) requests us to correct an error which occurs in our reference to his "Note on the Diffusion of Cholera" in THE LANCET of May 13th, page 653. The year referred to is 1867, not 1869.

HAY-ASTHMA.

To the Editor of THE LANCET.

SIR,—Last year you allowed me to recommend to your readers a safe and simple remedy for the unpleasant symptoms attending hay-fever. Those who have experienced relief from a trial of the sea-weed, as directed, would oblige by giving the result of the experiment for the benefit of other sufferers. For persons who are similarly affected by the perfume of flowers, as from the smell of newly-cut grass, the extract of sea-weed—a preparation of iodine,—in the portable form of a smelling-bottle, has been found most useful.

Yours obediently,

July, 1871. SANITOS.

M.D. complains that a man, lately a wheelmaker, has started a pharmaceutical (*sic*) establishment, and put on his plate "Dr. ——, Herbalist." The title "Dr." would seem to be based on the possession of a degree from the United States, as the herbalist puts on his bills "M.D.U.S." The letters "U.S." on the bills might be considered by a magistrate enough to protect the public from taking him for a registered English practitioner. But they are not used on the plate. The Act is probably violated; but it is very doubtful whether a prosecution would succeed.

INCESSANT HICCUP.

To the Editor of THE LANCET.

SIR,—Should any of your readers suggest a cure for the following case, I shall be very glad.

A middle-aged man, suffering from chronic bronchitis, has for the last week been troubled (at night-time especially) with incessant hiccup. Sulphuric ether, morphia, and hydrocyanic acid have been tried, as well as mustard plasters to the epigastrium, but without the slightest benefit.

I am, Sir, yours, &c.,

July 15th, 1871. W. A. D.

THE GERMAN AND FRENCH SAVANTS.

THE animosity between the two nations will probably diminish with time, and even now signs of a lessened degree of dislike are becoming apparent. Baron Liebig is paving the way by a conciliatory speech which he delivered very lately, and recalls the kindness shown to him by Gay Lussac in Paris forty-eight years ago.

Anxious Inquirer is informed that whatever might have been the misgivings as to the sanitary condition of Paris, the latest health statistics are favourable. No epidemic exists there; but the temperature has lately been high, and the cause of much distress to the overladen infantry soldier. Energetic and prudent measures seem to have been taken by M. Léon Say, the Prefect of Paris, aided by the counsel of Baron Larrey as Sanitary Commissioner.

THE CONTAGIOUS DISEASES ACTS.

To the Editor of THE LANCET.

SIR,—I find in your correspondents' column the announcement "that not a single case of abuse of power on the part of the police was substantiated before the Royal Commission." Permit me to tell you the reason why. The Commissioners declined to examine into these cases of abuse, or to hear the witnesses who were ready to come forward and prove the same. I am assured that this is the reason by the Secretary of the Association for obtaining repeal.

Your obedient servant,

Nottingham, July 14th, 1871. CHAS. BELL TAYLOR, M.D.

*** It seems to be very difficult to please the opponents of the Contagious Diseases Acts. We imagined that they had of late been having it all their own way. A Royal Commission has been long engaged in inquiring into the administration and operation of the Contagious Diseases Acts, and now it seems that the Royal Commissioners have refused the Repeal Association fair play! If Dr. Chas. Bell Taylor will kindly turn to pages 8 and 9 of the recently published Report of the Contagious Diseases Commission, he will perceive that the members of the Commission and the Secretary of the Association for obtaining repeal of the Acts are hopelessly at variance as to a statement of fact, and we prefer in the meantime to accept that by the former as correct.—ED. L.

Mr. Wm. John Smith.—In answer to our correspondent's first question, we have no special means of knowing whether "there is such a qualified person." The mode of signing death certificates is pretty good proof that the degree of M.D. is not in this case a legal qualification. Supposing this to be so, the plate is illegal, and the illegal partner might be prosecuted for a breach of the 40th clause of the Act of 1858.

LARGE MAMMARY ABSCESS IN THE MALE: TREATMENT BY FREE INCISIONS.

To the Editor of THE LANCET.

SIR,—It has been well remarked by one of the great masters in surgery, that there is no disease more universal than abscess, and none that demands from the surgeon clearer pathologic views.

The following case, though simple enough, is of some interest, and, as far as my experience goes, as well as from what I can gather from the books within my reach, rather rare in the male sex. You may, therefore, consider it worth placing on record.

Joseph A——, aged thirty, miner, applied a few weeks ago as an out-patient of the Chesterfield Hospital, with a hard, painful swelling of the breast of a somewhat doubtful character. It gradually became more elastic, and increased in size until it resembled, and indeed was larger than, the average female breast. Poultices were applied, and fluctuation being distinct in two places, free incisions were made, giving exit to a considerable quantity of pus. The man stated that when working in an iron-stone mine he was accidentally struck on the breast with a piece of wood, which was, no doubt, the cause of the irritation and subsequent mischief. He has made a good recovery.

Yours faithfully,

Chesterfield, July 13th, 1871. JOHN ROSE, M.D.

A Correspondent, (Halifax.)—The Committee appointed to consider the question of out-patient reform in London passed a resolution that the practice of receiving payments for medicine or medical advice from the out-patients of hospitals is undesirable. And the chief objections are: that it gives a sense of right; that it establishes a competition, which tends to lower the rate of professional remuneration in the district; that it renders the establishment of provident dispensaries impossible, since no working man will be induced to make payments beforehand to such dispensaries if he can obtain assistance at the hospital by a *small* payment at the moment he requires it. Our correspondent may obtain a copy of the report on the subject on application to Dr. Meadows, 27, George-street, Hanover-square; or Dr. Stallard, 7, King's-road, W.C.; price 1s.

REMOVAL OF SMALL-POX PATIENTS.

To the Editor of THE LANCET.

SIR,—About a fortnight back it came to my knowledge that the body of a young woman of the name of Jones (who had died in the North London Hospital of small-pox) had been brought into this district for burial at Blakney. I am unable to give the exact date of the body being brought from London, but it must have been within the past five weeks.

On July 8th I visited a case in the same district, which proved to be a case of modified small-pox. As the parties live a mile apart, there may or may not be any connexion between them.

I cannot but think the authorities of the hospital, as well as the sanitary officers of London, were very wrong in allowing the body to be removed; and the object of this letter is to protest (through your columns) against the removal of bodies of persons dying in London of small-pox or other contagious diseases into healthy country districts, as being contrary to all sanitary rules.

Yours truly,

Cinderford, Gloucester, July 18th, 1871. WM. HEARN, F.R.C.S.

CLUB SURGEONS AND VACCINATION.

WE think it reasonable for the public vaccinator to object to vaccinations being done on a large scale, and as a rule, by the Club surgeons gratuitously. Club surgeons may well ask to be excused from a duty for which special public provision is made.

Mr. William Cooper is referred to the Students' Number of THE LANCET, Sept. 10th, 1870, for information. He will be required to produce proof of having served an apprenticeship or pupilage of not less than five years to a practitioner qualified by the Act of 1815. This period may, however, include time spent in attending lectures and hospital practice.

TONGUE-SUCKING.

To the Editor of THE LANCET.

SIR,—Will any of your readers kindly suggest any method I could adopt to make a little patient, aged three years and a half, discontinue sucking his tongue. This is not one of the ordinary tongue-sucking cases in which the mouth is kept closed and perhaps pursed up during the process, but a portion of the tongue gradually as the sucking goes on protrudes between the open lips, giving the little fellow (a nice-looking boy) a rather repulsive and vacant appearance. While the sucking goes on with the tongue protruded, the latter looks like a pulsating tumour. I have tried all sorts of things, such as bitter substances, castor oil, &c.; but neither these nor moral measures have proved of any avail.

Yours faithfully,

July, 1871. WARRA.

Mr. Robt. Bowles, (Folkestone.)—We do not think our correspondent could do better than recommend the perusal of Dr. Seaton's work, or that by Dr. Ballard. The pamphlet on "Vaccination" by Dr. Blake, noticed in THE LANCET of July 1st, is also very clear and conclusive.

W. H. H.—We are of opinion that the M.D. in question violates the 40th clause of the Medical Act by implying that he is a registered British practitioner, recognised by law as a physician, surgeon, &c. It is for our correspondent to consider whether it is worth while to take a magistrate's opinion on the matter.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Basham; Mr. Durham; Dr. Dale; Mr. Trendell; Mr. White; Mr. Marshall, Aston; Dr. M'Gregor, Swansea; Dr. Sylvester; Mr. Pritchard; Mr. Potter, Manchester; Dr. Ambrose, Dalhousie; Mr. Farm, Glasgow; Mr. J. Anderson; Dr. Eaton; Mr. Davies; Mr. Crofts; Mr. Healey; Mr. Watson; Mr. Hill; Dr. Hardwicke, Rotherham; Mr. Fowler, Kingsford; Mr. Barker, Kettering; Mr. G. Benson, Bristol; Mr. A. J. Jones; Dr. Garrett, Newport; Mr. Cahon, Brighton; Mr. Smith Day; Dr. Smith, Dumfries; Dr. Lister, Ashton; Surgeon-Major Atcheson; Dr. Lownds, Egham Hill; Dr. Calvert, Manchester; Mr. Kempster, Battersea; Mr. Wallis; Mr. Heane, Cinderford; Dr. Pogson, Seacroft; Mr. Jameson; Mr. Walter; Dr. Reynolds, Thame; Mr. Hards; Mr. Horsfall, Leeds; Mr. Bickersteth; Mr. Nairn; Mr. Morgan, Aberdare; Mr. Hyslop, Church Stretton; Dr. Whitson, St. Andrews; Mr. Kemp, Cardiff; Dr. Williams, Hayward's Heath; Mr. Rowland, Thurso; Mr. Beckwith, Charlton; Mr. Thorne; Mr. Deane, Glastonbury; Mr. Temperley; Mr. Walton; Dr. Alibutt, Leeds; Mr. Dent; Mr. Latham; Mr. J. Steggall; Mr. Rugg; Mr. E. Powles, Uppingham; Dr. Taylor, New Cross; Mr. Goddard; Mr. Chapman; Mr. Nicol, Bradford; Mr. Bowles, Folkestone; Mr. Falkland; Mr. Hammond; Dr. Boggs, Paris; Mr. Hamilton; Mr. Foster; Dr. Barham, Halstead; Dr. Hawkes; Mr. Sewell; Dr. Taylor, Nottingham; Dr. Ebsworth; Dr. Evans, Dublin; Dr. Lewis, Llanelly; Mr. Stevenson; Mr. Cumming; Mr. Pritchett, Brighouse; Dr. Rose, Chesterfield; Mr. Buckton; Mr. Hooper, Stoneland; Mr. Naylor; Mr. Todd, West Auckland; Dr. Morgan, Dublin; Dr. Cheadle; Mr. E. Marsh, Epsom; Mr. Shepperton; Mr. Blackett; Mr. Remmington, Oldbury; Mr. Golding; Mr. Mosely; Mr. Weale, Hartford; Mr. Rogers; Dr. Hearder, Plymouth; Dr. Evans, Narberth; Mr. Salmon; Dr. Palfrey; Mr. Pollard; Mr. Hazlewood, Castleton; Mr. Henry; Mr. Swan, Northleach; Dr. Skinner, Nailsea; Mr. Dowding; Mr. Sidwell; Mr. H. Wilson, Dublin; Mr. Sainton, Alresford; Mr. Bennett; Mr. Davis, Brooklands; Mr. Crook, Waterford; Dr. Sheen, Cardiff; Mr. Howell; Dr. Workman, Teignmouth; Mr. T. Orton, Chelmsford; Mr. J. Hare, Shepton Mallett; Mr. W. Norton, Chepstow; Mr. Cramp; Mr. Baynes; Mr. Lawrence, Cambridge; Mr. Robertson; Mr. L. Watson, Stafford; Mr. Waring, Rochford; Dr. Leslie; Mr. Layton; Mr. Saunders; Mr. D. W. Phillips, Hales Owen; Mr. Chapple, Kirkee; Dr. Mackenzie; Dr. Neild, Melbourne; M. and B.; An American Graduate; R. E. D.; A Constant Reader; M. A.; Gallio; Medicus; A Baltic Captain; &c. &c.

Northern Daily Express, Keighley News, Weekly Hampshire Independent, Staffordshire Sentinel, Daily Southern Cross (Auckland), *United Service Gazette, Saunders's News-Letter, Scotsman, Walsall Free Press, Nottingham Express*, and *Spiritualist* have been received.

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